GZA GeoEnvironmental, Inc.

FINAL
IPEC QUARTERLY LONG-TERM GROUNDWATER MONITORING REPORT
QUARTER FOUR 2010
(REPORT NO. 12)
INDIAN POINT ENERGY CENTER
BUCHANAN, NEW YORK

PREPARED FOR:

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THE POWER OF PEOPLE™

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Re: **FINAL IPEC Quarterly Groundwater Monitoring Report**
Quarter Four 2010 (Report No. 12)
Indian Point Energy Center
450 Broadway
Buchanan, New York 11501

Dear Mr. Doroski:

GZA GeoEnvironmental of New York (GZA) is pleased to provide this Quarterly Groundwater Monitoring Report for Indian Point Energy Center located at 450 Broadway, Buchanan, NY.

We trust that this information satisfies your present needs. Should you need any additional information, please do not hesitate to call us at (781) 278-3805.

Very truly yours,

GZA GEOENVIRONMENTAL OF NEW YORK

Josh Simpson
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Attachments: 3 Copies

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1.0 EXECUTIVE SUMMARY

On behalf of Entergy Nuclear Northeast, Inc., GZA GeoEnvironmental of New York (GZA) has completed the Q4 2010 quarterly groundwater monitoring for the Indian Point Energy Center (IPEC), culminating in this report. Interpretations of the monitoring data have been made in the context of the current Conceptual Site Model[1] (CSM). Development of this model began at the outset of the site investigations and has been iteratively enhanced as subsequent data has become available, in part through quarterly monitoring. The report has been written with a focus on the subject quarter's data. Relationships to prior data, more in-depth technical explanations and exceptions to generalized statements and conclusions have typically been explained in the footnotes. This report format was chosen to allow efficient assimilation of the most current data and analyses by those already familiar with the project. The footnotes contain important information and should be carefully read by all, but particularly by those less familiar with the technologies involved and the project history. It is further noted that the analyses and conclusions presented in this report are based on the data and information available up to and including the subject quarter. Data that becomes available after the subject quarter, but before the finalization date of the report is sequentially reflected in the associated subsequent reports.

Consistent with our interpretation of earlier data, and based on the quarterly groundwater sampling data for Q4 2010, GZA concludes that groundwater contaminants continue to migrate toward the Hudson River to the West, and have not migrated off the Site to the North, East or South.

Radionuclide concentrations measured during Q4 2010 were combined with previous quarterly and post-quarterly data to compute rolling average concentrations reflective of groundwater contaminant levels over the past twelve months. These data were multiplied by the associated individual zone-specific groundwater flux values, derived from the Precipitation Mass Balance Model[2], to compute yearly average radionuclide release rates to the Discharge Canal and Hudson River. The CSM, upon which this radionuclide dose computation is based, continues to be validated through: (1) groundwater elevation data downloaded quarterly from a focused set of transducer-monitored well installations; and (2) the behavior of both the Unit 1 Strontium plume and the Unit 2 Tritium plume as evaluated each quarter. These data, in our opinion, continue to support the use of the current CSM as a basis for Long Term Monitoring Program design.

The most recent quarterly data further support the conclusion that the overall Tritium activity in the Unit 2 plume is generally showing a historically decreasing trend, from both qualitative and quantitative perspectives. These overall reductions are seen on **Figure G-17**, where the total Tritium activity has decreased by approximately 45% since Q2 2007, and 89% when compared to the bounding level Tritium activities. This overall trend is also evident on **Figures 6** and **6A,** where the shaded plume[3] no longer extends downgradient to the river, as first observed in the

[1] The formulation and basis for the overall CSM and the Precipitation Mass Balance model are presented in the Hydrogeologic Site Investigation Report, January 7, 2008, prepared by GZA GeoEnvironmental, Inc, on behalf of Enercon Services, Inc., for Entergy Nuclear Northeast, Indian Point Energy Center, 450 Broadway, Buchanan, NY 10511.

[2] Refer to Appendix H of the Quarter 2 2009 Quarterly Long-Term Groundwater Monitoring Report for discussion of the recalibration of the Precipitation Mass Balance Model. Precipitation and groundwater elevation data were collected onsite between 2007 and 2009 and used to compute groundwater fluxes across the site. Based on analyses of these data, it was concluded that this data set sufficiently encompassed the historical variability in groundwater elevation and flux response to seasonal and yearly precipitation variability. Therefore, maximum onsite groundwater fluxes were calculated from the elevation data, and used to conservatively recalibrate the Precipitation Mass Balance Model, as discussed and employed in the Q2 2009 Quarterly LTM Report.

[3] The plume shading on **Figure 6** demarks the estimated boundary that separates Tritium levels greater than 5,000 pCi/L from those below this value, and provides a reasonable demarcation level for illustrating plume geometry and temporal variation. Although, this value equates to one-quarter of the drinking water standard for Tritium, GZA emphasizes that drinking water standards (USEPA MCLs) do not apply to the IPEC property given that there are no drinking water sources on or proximate to the site. Where yearly

Q2 2009 data. It is further visually evident from **Figure 6A** that the core of the plume has also shown a marked decrease in concentration and extent over time in the vicinity of MW-111. These findings are consistent with our CSM, which anticipates overall decreasing trends in Tritium activity.

Consistent with one of the purposes of this Report, we also point out and explain data which, when first considered, may initially appear inconsistent with the assumptions used to develop the CSM. Such examples, where Tritium has increased in recent quarters, include:

- A transient Tritium peak in Manhole A2 and, to a lesser extent, MH-A4 was observed during the previous (Q3 2010) quarterly monitoring round. Additionally, a similar peak was initially observed during Q2 2009, which initiated a series of investigations into the underlying correlation, and likely causation of the Tritium peaks observed in downgradient monitoring wells[4]. Beginning in mid-September 2010, another Tritium peak was observed in MH-A2 and MH-A4 (approximately 50-100 times the typical historical activity within MH-A2). Prior and more recent investigations indicate that these Tritium peaks appear to be associated with higher levels of washout[5] entering the Fuel Storage Building (FSB) roof drain leading directly into MH-A2 when the vent fan is not operating[6]. The Q3 and Q4 2010 sample data from a standpipe, constructed in A2 during Q3 2010 to isolate FSB roof drain water, demonstrate that the recent Tritium activity within MH-A2 is directly proportional to the discharge from the FSB roof. Based on the investigations and associated data collected, it has been concluded that the elevated Tritium levels detected in MH-A2 and A4, as well as the proximate and downgradient monitoring wells (MW-41-40, MW-45-42 and MW-46) and manhole B-1, are due to the FSB roof condensate and, as such, do not indicate a new leak from a SSC (see **Section 3.4.4, MW-41-40** below for further discussion).
- The Q4 2010 result for MH-5 VCFD showed that the Tritium activity remained at previous baseline levels, following the rapid reduction[7] from the clear increase in Q3 2010 by approximately a factor of ten when compared to the previous base line sampling results (**see Figure 6B** and **Section 3.4.4, MH-5 VCFD** below for further discussion).
- The flow rate into the Leak Collection Device (LCD) remained at baseline (<0.2 liters/day) during the current, Q4 2010, monitoring period. This return to baseline conditions, in October 2010, followed a clear increase in the volume of water collected, with an average flow rate of approximately 1.5 L/day measured in the previous (Q3 2010) quarter[8]. Investigations by GZA indicated that the increased flow observed in Q3

rolling average radionuclide activity data were available for multiple depths at a given location, GZA used the highest value to develop plume delineations. This is a typical approach to conservatively represent three-dimensional contaminant data sets on two-dimensional maps.

[4] Elevated Tritium activity has been observed at both MW-46 and MW-41-40 during the past two quarterly monitoring rounds (Q3 and Q4 2010); a similar peak was observed in MW-45-42 after the 2009 increase in MH-A2. MW-45-42 is located proximate to MH-A2; MW-41-40 is located directly adjacent to this storm drain system, between MH-A2 and A4; and MW-46 is located hydraulically downgradient of MH-A2. Therefore, the increase in Tritium activity at these two monitoring installations is likely related to the Tritium peaks observed in MH-A2 and A4.

[5] The term "washout," as used herein, is the process by which Tritiated water vapor is transformed into Tritiated water as a liquid. In general, this transformation is driven by condensation (as is the primary underlying driver associated with MH-A2, above) and/or Tritium diffusion from the Tritiated water vapor into precipitation (rain and/or snow), either while it is still falling or after deposition.

[6] It is noted that the Tritiated water vapor evaporating from the SFP is a permitted release through the Plant Vent located atop the VC building. Analyses were conducted to account for this release to the FSB roof in the dose computations. This same Tritium has therefore been "double counted" because it is again included in the storm drain and groundwater portions of the dose computations.

[7] After the Q3 10 increase, the Post-Q3 2010 sampling data from only 10 days later show the Tritium activity in MH-5 VCFD had already returned to the previous baseline levels.

[8] All of the water collected by the LCD is fully contained and does not enter the groundwater regime.

2010 could potentially be correlated[9] with the timing of atypically elevated water levels in the fuel pool, as associated with dry cask work. Following the limiting of these increases in pool water elevation, a marked decrease was observed in the LCD flow rate. Based on these observations, **Figure 6B** was developed in Q3 2010 and has been included in this, Q4 2010, quarterly report. This figure visually presents both the historical LCD flow rate data and the Tritium data for the sampling intervals located within the Unit 2 Tritium plume boundaries. The recent LCD data are discussed in more detail in **Section 3.4** below.

- Peaks in Tritium activity have been observed in multiple sampling ports of MW-31 and MW-32 since Q1 2009 and to a lesser extent since monitoring began. This long-term variability appears to be consistent with episodic releases of Tritium historically stored in the subsurface via natural and anthropogenic Retention Mechanisms[10]. This conclusion is further supported by the tracer data and other analyses discussed in Section 3.6 of the Q1 2009 Long Term Monitoring Report.
- While Retention Mechanisms clearly appear to impact Tritium activity as summarized above, more noticeable increases in Tritium levels in a number of intervals within MW-31 and MW-32 were initially observed during the Q1 and post Q1 2010 sampling events, where Tritium activities peaked at levels higher than previously measured. Similarly elevated Tritium activities continued through the Q2 2010, Q3 2010 and Post-Q3 2010 sampling events at these Unit 2 locations. These elevated Tritium activities appear to be related to a Q4 2009 surface spill proximate to these wells from a temporary rental RWST/R.O. processing skid[11], which was first detected during routine 80-10[12] sampling of MH-9 in mid-January 2010.

  During the current (Q4 2010) sampling event, the Tritium activity in the majority of these sampling intervals (e.g. MW-31-63, MW-32-59, MW-32-149 and MW-32-173) are showing reductions in Tritium activity, approaching the typical historic Tritium levels at these monitoring locations[13]. These reductions appear to be in response to the dissipation of the RWST/R.O. spill as it moves downgradient towards the river, as previously predicted based on the short duration of the elevated Tritium levels measured at the release point in MH-9. While this downgradient migration results in decreasing Tritium levels proximate to the release point, downgradient wells may potentially exhibit additional future Tritium peaks, even possibly exceeding the Unit 2 Tritium I.L.s.
- The Tritium peaks referenced above resulted in an increase of the Unit 2 plume total Tritium activity in Q2 2010. However, as shown on **Figure G-17 (Appendix G)**, this previous increase was immediately followed by a decrease (of similar magnitude) beginning in Q3 and continuing in Q4 2010.

[9] While the data trends appear to correlate, it is noted that simple correlation does not demonstrate causation.
[10] These Retentions Mechanisms are discussed along with the CSM in the previously cited Hydrogeologic Site Investigation Report.
[11] This transient and localized surface spill involved a rented RWST/R.O. processing skid brought on-site by an outside contractor. As such, this equipment is not an in-place Unit 2 SSCs and is no longer on site.
[12] NRC Inspection Enforcement Bulletin (IEB) 80-10, Contamination of Nonradioactive System and Resulting Potential for Unmonitored, Uncontrolled Release of Radioactivity to Environment, May 6, 1980.
[13] The Q4 2010 sample result in MW-32-85 shows a continued increasing trend in Tritium activity since Q1 2010 within this sampling interval. It is noted that the 2010 Tritium Investigation Level has NOT been exceeded at MW-32-85 from Q1 2010 through Q4 2010.

- Our review of data found no conclusive evidence that the observed increases in Tritium activity result from the development of new, unidentified leaks in the Unit 2 SFP or other monitored Systems, Structures, or Components[14].

The overall Sr-90 activity within the Unit 1 plume had generally been stable to decreasing in response to the West Pool demineralization operations conducted by Entergy beginning in 2006. However, the final defueling of the Unit 1 SFPs, completed in Q4 of 2008, resulted in a noticeable increase in Strontium activity proximate to the SFPs, followed by downgradient increases (see **Figure 7** and **7A**). This was expected given the requirement to temporarily raise the pool levels for fuel rod removal, thus increasing leakage rate from the SFPs[15]. As expected, the Strontium activities proximate to the pool have since decreased to pre-defueling levels (U1-NCD, MW-42-49, U1-SFDS), and Strontium activities downgradient of the pool are currently exhibiting decreasing trends approaching pre-defueling levels (MW-37, U1-CSS) or have decreased to pre-defueling levels (MW-50, MW-55, MW-57) in recent quarters. It is expected that the further downgradient wells will also fully return to pre-defueling levels once this transient perturbation has passed through the groundwater flow system. It is anticipated that this flushing mechanism will be protracted given the impact of partitioning on Strontium levels in the groundwater.

Based on the data and analyses provided herein, our conclusion is that the Tritium and Strontium plumes have both been undergoing overall long-term reductions in activity after the respective source interdictions. Given this conclusion, and the recognition that Entergy has terminated all identified leaks in the Unit 2 SFP[16] and has decommissioned the Unit 1 SFPs, these plumes satisfy the requirements for Monitored Natural Attenuation (MNA), the remedial technology selected for the IPEC Site. However, it is also concluded that, while a portion of the leakage from the above cited localized, transient spills traveled directly to the saturated groundwater regime and resulted in the observed transient "peaks" in radionuclide levels, additional portions of these releases likely remain above the water table as recharge to the various Retention Mechanisms. This additional unsaturated zone source recharge will likely be manifested in the future as additional non-specific peaks in radionuclide levels due to episodic releases to the groundwater flow regime from these mechanisms (e.g., from intense/prolonged precipitation events). These localized release events also interfere with the goal of resetting Site Investigation Levels (I.L.s); updating of Strontium I.L.s must therefore await return to the original Strontium baseline levels existing prior to Unit 1 defueling in the downgradient wells (i.e. MW-

[14] However, it is noted that the LCD flow rate spiked up during the previous (Q3 2010) quarter. While: 1) the flow rate did return to baseline during this quarter, 2) all LCD water is fully contained and does not enter the groundwater regime, and 3) the Tritium peaks observed in the groundwater monitoring intervals can be explained by the transient RWST/R.O. processing skid surface spill and associated Retention Mechanisms, peaks in MW-31, MW-32 and MH-5 VCFD appear to be potentially correlated, on a temporal basis, with this increased LCD flow rate. In this regard however, it is noted that while the data trends appear to correlate on a temporal basis, simple correlation does not demonstrate causation.

[15] As of late 2008, all the fuel rods have been removed from the Unit 1 SFPs and the pool water has been drained. As such, the Unit 1 SFPs is no longer an active source of radionuclides to the subsurface.

[16] Further justification for this conclusion can be found in Section 3.6 of the Q1 2009 Quarterly Monitoring Report as well as the Hydrogeologic Site Investigation Report. The Q1 2009 Report summarizes additional, more quantitative analyses which were completed to further investigate the integrity of the Unit 2 SFP. These analyses provide further support for the original conclusion that the Unit 2 SFP is no longer leaking. However, given the behavior observed in the Unit 2 collection device data (see Section 3.6 of the Q1 2009 Long Term Monitoring Report and Section 3.4 of the Q3 2010 Long Term Monitoring Report), additional investigations/data evaluations are underway to further rule out potential Unit 2 SFP leak mechanisms. In this regard, it is noted that these analyses cannot definitively and completely rule out the possibility of a remaining small leak which could then also be supplying Tritium to the groundwater flow regime in addition to the Retention Mechanism(s) and surface spill from the process skid discussed above. While it is not possible to quantify the size of the minimum detectable leak with any degree of certainty, we believe that the maximum leak rate from the Unit 2 SFP that could potentially remain undetected by the groundwater monitoring system is less than 10 to 30 gpd (0.007 to 0.021 gallons per minute). It is also likely that if a small leak exists in the Unit 2 SFP liner, it should not get worse with time. This opinion is based on liner evaluations previously conducted by Entergy. It is further emphasized that while a leak of more than 0.02 gallons per minute should be large enough to be readily detectable with the existing Long Term Monitoring Program; this amount of Tritium release to the river is still small (<0.01%) compared to permitted levels of Tritium discharge to the river through the Discharge Canal.

37, MW-50, MW-57), and additional seasonal data is required to better assess Tritium response to precipitation-driven Retention Mechanism release variability. Therefore, the ultimate confirmation of the above conclusions will require monitoring over a number of years so as to allow ranges in seasonal variation to be adequately reflected in the monitoring data and thus demonstrate the rate of continued depletion of Tritium and Strontium from the Retention Mechanisms. In this regard, it is important to recognize that even with the somewhat increased Tritium levels currently observed due to the transient surface spill from the rented RWST/R.O. skid, the amount of radionuclides being released through the groundwater pathway is still small compared to permitted levels of Tritium discharge to the river through the Discharge Canal.

In summary, based on the data collected to date, the apparent strength of the CSM to evaluate that data, and the completion of source interdictions by Entergy, we believe all Program Objectives (see **Section 3.0**) are being met. These objectives are consistent with and fully encompass the guidance provided in the NEI Groundwater Protection Initiative (GPI).

2.0 SCOPE OF WORK

During Q4 2010, GZA performed groundwater monitoring at IPEC in Buchanan, New York (Site) as part of IPEC's overall Long Term Groundwater Monitoring Program (LTMP) at the Site[17]. The overall foundation for the development and execution of this LTMP is based on the CSM, a description of which is contained within GZA's Hydrogeologic Site Investigation Report[18]. The scope of work completed for this quarter's monitoring is described in the Sections below. Refer to **Figures 1 and 2** for a Site Location Plan and Site Plan. **Figure 3** provides a Lower Hudson Valley Geologic Map and **Figure 4** summarizes Current and Potential Future SSC Source Locations.

2.1 Groundwater Elevation Measurement

GZA maintains a network of long-term monitoring transducers and dataloggers as part of the instrumentation located across the Site. These instruments record groundwater elevation and temperature measurements at regular time intervals[19], which are then downloaded on a quarterly basis[20]. Transducer installation logs are presented in **Appendix B**.

During the quarterly sampling, GZA downloaded groundwater elevation data from the long-term monitoring transducers, which collected data over the entire duration of the quarter. The low-tide groundwater elevation data during Q4 2010 (10/16/2010) from these 22 transducers are presented in **Table 2** and compared to historic minimum and maximum values on **Figure 5A**[21]**.** The Q4 2010 groundwater elevation data at three locations (four transducer intervals) are outside 30% of the Q2-2007 through Q2-2009 range. Two of these locations (three transducer intervals) are Unit 2 perimeter wells where the maximum deviation was less than one foot in elevation. Additionally, the final interval showed a deviation of less than two feet in elevation from the Q2-2007 through Q2-2009 criteria. These data show no alterations in overall groundwater flow direction and no substantial variations in the overall horizontal and vertical groundwater gradients. Therefore, these data demonstrate that substantial variations to the observed flow field have not occurred. These data thus further validate the applicability of the Precipitation Mass Balance Model (PMBM) for use in subsequent radiological dose computations – see **Section 3.1**.

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[17] Refer to the "Quarterly Long-Term Groundwater Monitoring Report Q2–Q4 2007 (Report No. 1)," dated May 2008 for Site background information and a description of the environmental setting.

[18] Hydrogeologic Site Investigation Report, January 7, 2008, prepared by GZA GeoEnvironmental, Inc, on behalf of Enercon Services, Inc., for Entergy Nuclear Northeast, Indian Point Energy Center, 450 Broadway, Buchanan, NY 10511.

[19] Currently, transducers record groundwater elevation and temperature readings on a 20 minute time interval so as to allow capture of tidal variability. An original, more extensive network of pressure transducers provided critical data inputs for the development of the CSM and the computation of yearly radiological dose to the Hudson River. Over the first nine quarters of the LTM program (Q2 2007 through Q2 2009) sufficient data was collected from this more extensive network of transducers to capture groundwater elevation response to seasonal and yearly precipitation variability. Therefore, starting with the Q3 2009 quarterly report, the transducer monitoring program was refocused on a select subset of locations to routinely monitor the on-Site groundwater conditions going forward. These locations were selected to provide the data required to document that groundwater flow conditions remain consistent with the CSM, thus demonstrating the veracity of the subsequent dose computations. The rationale for the specific locations and depths included in the LTMP transducer redeployment are provided in Appendix K of the Q1 2009 Quarterly Monitoring Report (Report No.5), dated July 2, 2010 and Appendix J of the Q2 2009 Quarterly Monitoring Report (Report No.6).

[20] With regard to these ongoing long term monitoring locations, it is noted that the transducers have a limited life. While some of the transducers can be replaced, and have been replaced in the past, others are permanently installed in the subsurface and are no longer accessible for replacement. However, with time, the base of data upon which model validity is assessed becomes increasingly more robust. Therefore, if some of these transducers fail over time, it is not likely that replacement will be imperative. This is because the likelihood of encountering a precipitation event substantially outside the already captured range becomes increasingly more remote with time as more data are collected. In addition, it is again emphasized that considerable conservatism has been incorporated within the model development and the dose rates computed are still far below those permitted by regulation.

[21] Figure 5, which previously presented shallow and deep groundwater contours, can be found in quarterly reports prior to, and including Q2 2009. This figure is no longer required given that sufficient quarterly contour data has already been obtained (See Q2 2009 for further analysis).

2.2 Monitoring Installation Sampling

During Q4 2010, GZA collected groundwater samples for radionuclide analysis from scheduled sampling intervals within select monitoring installations ("wells") as shown in **Table 3**. Chains of Custody for these samples are presented in **Appendix C**. Collection of additional groundwater sample volume to provide aliquots to regulatory agencies (e.g., Nuclear Regulatory Commission (NRC), NYDEC, etc.) was not required this quarter.

GZA used a number of different types of pumping equipment depending upon the sampling method and the characteristics of the individual monitoring installation[22]. **Table 1** lists the monitoring installations sampled, the sampling depths and elevations within sampling installations, and the sampling method and equipment used.

In general, GZA implemented two basic methods of sampling to collect representative groundwater samples: the Low Flow method and a modified well volume purge method. The Low Flow method allows collection of representative groundwater samples from discrete sampling zones within a monitoring installation, while limiting the accumulation of wastewater[23]. As agreed by Entergy Nuclear Northeast, the NRC, NYSDEC, and GZA, the modified traditional purge method[24] allows for the collection of a representative groundwater sample from a monitoring installation after purging 1.5 volumes of water[25]. We implemented this method in wells where low flow sampling was not practical. Sampling Data Sheets summarizing water quality data and sampling information are presented in **Appendix D**.

With all of the above sampling methods, GZA used dedicated sampling equipment, including polyethylene and/or nylon tubing and submersible electric pumps to the extent practical. The use of dedicated sampling equipment limits the possibility of cross-contamination between monitoring installations and/or individual multi-level samples within a single installation. Refer to T**able 1** for a summary of the sampling methods, equipment, frequency, and depths employed during this quarter's groundwater monitoring round.

2.3 Vapor Containment Building Foundation Drain Sampling

GZA collected a water sample from on-Site manholes MH-5 VCFD[26], B-1 and B-6 to characterize discharge from foundation drains around and below the Unit 2 and 3 Vapor Containment Structures. These drains include both foundation drains around the building peripheries ("curtain drains") as well as those around the sumps near the middle of the structures ("reactor sump footing drains"[27]).[28]

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[22] Refer to Section 4.3 of the Final 2007 Quarterly Long-Term Groundwater Monitoring Report No. 1, dated May 2008, for sampling method and equipment selection rationale.

[23] As described in: Low-Flow Sample Collection, GZA, 7/18/2007

[24] As described in: Modified Traditional Groundwater Sample Collection, GZA, 7/18/2007

[25] When external factors (such as well-surface-flooding from storm water runoff or overland flow of plant component leaks) might have infiltrated the top of the well and impacted ambient groundwater conditions at a specific sampling location, GZA typically purged three to five volumes of water (using the modified traditional purge method) prior to collection of a sample to attempt to obtain a representative groundwater sample.

[26] GZA collects the water sample from the vapor containment foundation drain (VCFD) input into this manhole and not the manhole's sump. Thus, the MH-5 VCFD sample name.

[27] We could not verify that a foundation drain exists around the reactor sump in Unit 2. The assumption that it does exist is based on the plans for Unit 3 and the similarities in construction of both units.

[28] These two Unit 2 drains which discharge into MH-5 VCFD, along with similar drains for Unit 3 which discharge into Manholes B-1 and B-6, form an integral part of the early leak detection monitoring network. However, sampling from these three manholes has generally been problematic for a number of reasons, but particularly due to conflicts with plant security measures which mandate that the manhole covers be permanently welded shut. Some limited access has been reestablished by modifying the manhole covers to allow for a small access opening. However, for Manholes B-1 and B-6, this modification still limits the ability to routinely collect samples clearly representative of only the foundation drain discharges rather than the total flow through the storm drains. The piping configuration in MH-5 does allow sampling specific to the foundations drains, hence the designation of this sample as

2.4 Proactive Mid-Quarter and Confirmatory Sample Collection

No proactive mid-quarter or confirmatory samples were collected Post-Q4 2010.

2.5 Preventative Maintenance

GZA performed general wellhead maintenance tasks, such as housekeeping of well vaults and roadboxes, and replacement of dedicated sampling equipment, tubing and transducers, as required.

MH-5 VCFD (i.e., Vapor Containment Foundation Drain). Further work is being undertaken on the manhole sampling systems in B-1 and B-6 to facilitate more representative sampling of these foundations drains.

3.0 DATA EVALUATION

The Long Term Monitoring Program was designed to provide data to address four main objectives:

- Monitor radionuclide activities and evaluate groundwater flow rate to both detect and characterize current and potential future off-Site groundwater contaminant migration to the Hudson River, both via direct groundwater discharge to the river and through infiltration into the Discharge Canal, from unplanned radionuclide releases of liquid effluents, so as to allow computation of potential radiation dose to the public from these releases;
- Monitor groundwater proximate to Systems, Structures and Components (SSCs) that exhibit a credible probability of resulting in a visually undetected release of radionuclides to the subsurface carrying an activity level of significance;
- Monitor groundwater along the property boundary to confirm that contaminated groundwater is not migrating off of the property to locations other than the river; and
- Monitor the groundwater plumes identified on-Site to demonstrate overall reductions in total activity over time as is consistent with the requirements of Monitored Natural Attenuation (MNA)[29], the selected remediation for the IPEC Site.

These objectives are consistent with and fully encompass the guidance provided in the NEI Groundwater Protection Initiative (GPI). The following sections provide data analyses to address these four objectives.

3.1 Groundwater Mass Flux Computation

As presented in the Hydrogeologic Site Investigation Report, the groundwater flow in both the upper and lower flow zones is toward the power block area from the North, East and South, with subsequent discharge to the Hudson River to the West. We estimate that groundwater flow associated with infiltration from the watershed may be as deep as 350 feet, but still ultimately discharges to the river. A corollary to this conclusion is that there is no groundwater flow, and thus no off-Site radionuclide migration from the power block area to the North, East or South.

To estimate groundwater flow (i.e., groundwater mass flux) beneath the Site, a groundwater flow model was constructed based on a precipitation mass balance analysis. This analysis is based on the precept that, on a long term average, the groundwater flowing through and discharging from the aquifer is equal to the watershed infiltration recharge; this conclusion was reached because the only substantial source of recharge to the aquifer is areal recharge derived from precipitation. The previous fifteen year average for precipitation measured at the Site is approximately 36 inches per year. Based on a USGS infiltration study[30], as well as the Precipitation Mass Balance Model (PMBM) calibration[31], approximately 25 percent of the

[29] The selection of MNA as the remedial strategy for the Site is discussed further in the Hydrogeologic Site Investigation Report.

[30] USGS. Water Use, Ground-Water Recharge and Availability, and Quality of Water in the Greenwich Area, Fairfield County, Connecticut and Westchester County, New York, 2000-2002.

[31] The Precipitation Mass Balance Model (PMBM) was initially calibrated to groundwater fluxes based on a Darcy's Law Model with groundwater gradients derived from Q2 2007 (June 1, 2007) low-tide groundwater elevation contours (initial reference data set). The two models use different sets of input parameters which are not dependent or related to each other. This calibration not only verified the reasonableness of the overall groundwater flow rates predicted by the PMBM, but also allowed further discretization of the groundwater flow into upper and lower flow zones as well as flow volumes upgradient and downgradient of the Discharge Canal. After reviewing the groundwater elevation and precipitation data from the Indian Point meteorological station over the time period from Q2 2007 to Q2 2009, it was concluded that sufficient seasonal data had been collected to encompass the majority of the precipitation variability observed over the last fifteen years. Therefore, the PMBM was also recalibrated after collecting the final full

precipitation falling on pervious surfaces over the Site watershed area recharges the groundwater system via infiltration.

Since precipitation represents the driving variable for groundwater flux in the PMBM[32], the yearly precipitation just prior to Q4 2010 (approximately 37 inches) was calculated and input into the recalibrated model to compute the flows used in the estimation of Q4 2010 dose values. Based on the USGS study cited above, the aquifer recharge rate is therefore approximately 10 inches for the year prior to the Q4 2010 monitoring event. Applying this value to the pervious surfaces within the six individual groundwater flow zones shown on **Figure 4**, it is estimated that approximately 5 gpm of groundwater flowed into the Discharge Canal from the upper and lower zones during the previous year. In addition, approximately 9 gpm and 11 gpm of groundwater flowed into the Hudson River from the upper and lower zones, respectively. Storm water discharging into the Discharge Canal and directly into the Hudson River was estimated to be approximately 41 and 4 gpm, respectively. These flows are further subdivided into flow zones with the further detail shown in the table in **Appendix F.**

3.2 Groundwater Sampling

The following sections describe the groundwater sampling results and associated QA/QC protocols.

3.2.1 Groundwater Sampling Results

Groundwater samples collected on behalf of Entergy during Q4 2010 were analyzed at GEL Laboratories for Tritium, Sr-90, Cs-137, Co-60, and Ni-63[33]. **Table 3** presents the Q4 2010 analytical results for these radionuclides. The rolling yearly averages, which are calculated using all the valid data from the previous year [Q1 10 through Q4 10], including Mid-Quarter and confirmatory samples, are also presented in **Table 3**. **Table 4** presents minimum detection concentrations (MDC), standard deviation, and I.L.s assigned to each well for the Q4-2010 analytical results. **Table 5** presents historic Site groundwater analytical data. Isopleth maps of rolling averages for Tritium and Sr-90 are presented in **Figures 6** and **7**, respectively. **Figure 8** presents a data map of rolling averages for Cs-137, Co-60, and Ni-63[34].

An overall evaluation of the sample handling, shipment and analytical procedures, indicates that the quality assurance quality control protocols have been met in Q4 2010 for all of the samples,

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set of transducer data in Q2 2009. Data analyses demonstrated that recalibration to the Q4 2008 data set yielded the most conservative (highest dose to the river) calibration of the nine quarterly data sets obtained during the LTMP, thus this quarter's (Q4 2008) data set was adopted for further dose computations. The recalibration of the model to the Q4 2008 data yielded Unit 1 / 2 Zone and total groundwater fluxes approximately 40% and 25% greater, respectively, than the original reference (Q2 2007) data set. Further information and the data analyses are provided in the Q2 2009 LTM report.

[32] To continue to validate the appropriateness and applicability of the PMBM, a subset of the existing transducers are being maintained and monitored quarterly as part of the Long Term Monitoring Program, starting with the Q3 2009 Quarterly Report. The primary objective of maintaining these transducers is to provide ongoing confirmatory data that demonstrate substantial changes to the on-Site groundwater flow field have not taken place and thus verify that the basic assumptions inherent in the PMBM continue to remain valid. The transducer locations are provided on **Figure 5A** of this quarterly report, and the rationale for the selection of these specific individual transducer locations is discussed in the Q1 and Q2 2009 quarterly reports. With regard to these ongoing long-term monitoring locations, it is noted that the transducers have a limited life. While some of the transducers can be replaced, and have been replaced in the past, others are permanently installed in the subsurface and are no longer accessible for replacement. However, with time, the base of data upon which model validity is assessed becomes increasingly more robust. Therefore, if some of these transducers fail over time, it is not likely that replacement will be imperative. This is because the likelihood of encountering a precipitation event substantially outside the already captured range becomes increasingly more remote with time as more data is collected. In addition, it is again emphasized that considerable conservatism has been incorporated within the model development and the dose rates computed are still far below those permitted by regulation.

[33] It should be noted that samples were also analyzed for gamma emitters via gamma spectroscopy. Although only Co-60 and Cs-137 are reported, gamma spectroscopy should detect and identify other gamma emitters if they became present in groundwater.

[34] Isopleths were not drawn for Cs-137, Co-60, and Ni-63 because the few positive detections observed did not indicate the existence of a groundwater plume containing these radionuclides. This is likely a result of the high surface affinity (highly adsorptive nature) of these radionuclides for solid geological materials. They therefore tend to rapidly partition out of the groundwater.

and the analytical results should be useable as presented in **Table 5**. This conclusion is further supported by a review of the Q4 2010 analytical data, as compared to previous historical trends. Refer to **Section 5.2.2** of the Final 2007 Quarterly Long-Term Groundwater Monitoring Report No. 1 for further details pursuant to quality assurance quality control protocols.

3.3 Radionuclide Release Rates

The recalibrated PMBM-derived groundwater flows within each of the six flow zones are multiplied by yearly rolling average radionuclide levels within each zone to compute groundwater radionuclide release rates to the Discharge Canal and Hudson River. These groundwater radionuclide release rates are computed separately for upper and lower flow zones as well as upgradient and downgradient of the Discharge Canal. The selection of specific monitoring locations for each of the six zones is described in the January 25, 2008 Memorandum – Synopsis of Long Term Monitoring Plan Bases.

Storm drain flows[35] computed based on yearly precipitation rates are multiplied by radionuclide concentrations measured in the storm drains to compute the associated storm drain radionuclide release rates[36] to the Discharge Canal and Hudson River.

The radionuclide release rates from the groundwater and storm drains to the Discharge Canal and Hudson River for Q4 2010 are shown in the table below.

	GROUNDWATER AND SURFACE WATER TO RIVER (Ci/YR)	GROUNDWATER AND SURFACE WATER TO CANAL (Ci/YR)
Northern Clean Zone*	3.64E-04	0.00E+00**
Unit 2 North Zone	5.65E-04	5.90E-02
Unit ½ Zone	5.84E-03	6.53E-03
Unit 3 North Zone	2.77E-03	9.29E-04
Unit 3 South Zone	1.76E-03	2.43E-02
Southern Clean Zone*	4.19E-03	1.17E-02

* Activity in the Northern Clean Zone is attributable to an assumed Tritium background concentration of 150 pCi/L in the groundwater. The remaining radionuclides were assumed to not be present in this streamtube. Radionuclide release rate in the Southern Clean Zone is calculated from activity measured in monitoring wells MW-40 and MW-51.
** The radionuclide release rate to the Discharge Canal from the Northern Clean Zone is zero because the Discharge canal does not extend far enough to the north to be downgradient of the Northern Clean Zone.

These release rates are then used by Entergy to calculate the radiological dose to a hypothetical maximally exposed individual and the environment via the Discharge Canal and the Hudson River using the procedure outlined in the Off Site Dose Calculation Manual (ODCM) Reversion 3.

3.4 SSCs and Property Boundary Monitoring

In addition to providing the data for the dose computation discussed above, the Long Term Monitoring Program has been designed to also provide rapid detection of potential leaks from SSCs. This monitoring is specifically focused on those SSCs which exhibit a credible probability

[35] The storm drain flows also include groundwater discharges from the foundation drains for Unit 2 and Unit 3 VC Buildings, but not from the Unit 1 NCD and SFDS, which are otherwise accounted for.
[36] It is noted that storm drain samples are not typically taken at times coincident with peak, or even average storm drain flow rates. By its very nature, the vast majority of the flow through the storm drain system tends to be episodic and of short duration due to storm events; sampling rounds are generally scheduled to avoid such events. Radionuclide concentrations are primarily due to groundwater infiltration into the drains and thus tend to be highest during periods of little rain when this infiltration is not diluted by the storm water flow. This incongruence therefore yields a high bias to the dose computation because the elevated concentrations associated with low flow rates are multiplied by the much higher flow rates based on total yearly rainfall.

of resulting in a visually undetected release of radionuclides to the subsurface[37]. The monitored SSCs are shown on **Figure 4** and a description of the specific monitoring installations associated with each SSC are provided in the January 25, 2008 Memorandum – Synopsis of Long Term Monitoring Plan Bases. In addition to monitoring the SSCs, on-Site and off-Site wells are used to monitor the property boundaries for unanticipated radionuclide migration across these boundaries. Again, the rationale underpinning the selection of wells designated for this purpose is provided in the above cited Memorandum. These monitoring protocols are consistent with the NEI Groundwater Protection Initiative (GPI).

Entergy is also in the planning process to add an additional multi-level monitoring installation located near the south west corner of the Unit 3 Transformer Yard, downgradient of MW-46[38]. While MW-46 was previously evaluated relative to Unit 3 monitoring effectiveness, and was found to be very useful for detecting potential future releases, we also concluded that without an additional monitoring well installation, there is a moderate risk that some releases could go undetected. In particular, it appears that a release in the vicinity of the Waste Holdup Tank pit could potentially proceed toward the river to the south of MW-46, given the likely hydrology associated with the pre-construction bedrock valley in this area. As such, we recommended, and Entergy agreed to, the construction of an additional monitoring installation at Unit 3 to increase the robustness of the Unit 3 well network and thus reduce this potential risk. Installation of this well is currently scheduled for 2011. The sampling of U1-NCD and U1-SFDS will also be continued as part of the Long Term Monitoring Program.

I.L.s were established for the associated monitoring wells to set quantitative radionuclide concentrations above which further action would be undertaken. As part of the ongoing groundwater monitoring program, the reported analytical concentrations are compared against I.L.s established based on the criteria shown in the table below. I.L.s are currently computed each year based on yearly averages of all the valid groundwater sampling analytical results of the previous year including Aliquot, Confirmatory, and Mid-Quarter sample results[39]. The monitoring well-specific I.L.s are presented in **Table 4** and are established for comparison with 2010 analytical results based on the quarterly samples collected and analyzed in 2009.

[37] As discussed further in the following sections, reporting of visually identified spills/leaks within structures is included within Condition Reports under Entergy's Corrective Action Program. Additional emphasis has been placed on routine review of these reports as they potentially relate to GPI objectives.

[38] A cross section has also previously been developed through the Unit 3 area to supplement **Figure 4** and further demonstrate the relationship of site groundwater flow patterns and monitoring well placement relative to the individual Unit 3 SSCs (similar cross sections were previously developed for Units 1 and 2, as presented in the Hydrogeologic Site Investigation Report). This Unit 3 cross section C-C' is included in the Q1 2009 Quarterly Report as Figure 4A.

[39] The calculation of ILs and yearly rolling averages prior to the Q1 2009 Report were based on the analytical results from the quarterly sampling rounds only, and therefore excluded aliquot, confirmatory and mid-quarter sample results. For the Q1 2009 Report and thereafter, if an aliquot analytical result confirms that the original quarterly analytical result was false, then only the aliquot result is utilized in the yearly IL calculation. If the aliquot result confirms the original quarterly result is valid, then both the original and the aliquot results are averaged together and then averaged into the yearly IL calculation as a single value. Confirmatory analytical results have the potential to impact the use of the original quarterly sample in the same manner as aliquots; however, unlike aliquots, these "independent samples" are averaged directly into the yearly rolling average without "pre-averaging" with the associated quarterly sample. Similar to confirmatory samples, mid-quarter samples are also averaged directly into the yearly rolling average calculation. However, mid-quarter sample results do not have any impact on the use of the initial quarterly samples as can either aliquot or confirmatory samples, as described above. In the case of both confirmatory and mid-quarter sample results, direct averaging into the yearly average of these additional results can somewhat bias the yearly average toward a particular quarter/season. However, given that confirmatory and mid-quarter samples are typically taken to confirm and/or prepare for uncharacteristically high radionuclide concentrations, this direct averaging provides a high bias to the subsequent yearly dose computations, and is thus conservative. In cases such as this where some bias inevitably will be created, establishing a conservative bias in the dose computations is considered more important than maintaining a seasonal non-bias.

WELL ID	INVESTIGATION LEVELS (I.L.s)		
	TRITIUM pCi/L	Sr-90 pCi/L	OTHER PLANT-RELATED RADIONUCLIDES
On-Site Boundary Wells (MW-40, MW-51, MW-52, and MW-107)	1,000**	2**	any detection*
Riverfront Boundary Wells (MW-60, MW-62, MW-63)	2,000**	2**	any detection*
All Other Wells	>2x average***	>2x average***	>2x average***

* A radionuclide is positively detected when the result is greater than or equal to the MDC and 3 times the 1 sigma uncertainty.
** The values of 1000 and 2000 pCi/L for H-3 and 2 pCi/L for Sr-90 have been chosen to be low enough to result in timely detection of a new release or change to an existing release and still be outside the normal expected range of sample results at these locations, to the extent possible with the currently available data over time.
*** Any positively detected radionuclide that has a result greater than 2 times the average from the previous year. However, the IL is not reached until an H-3 result is also greater than 1000 pCi/L or a Sr-90 result is also greater than 2 pCi/L.

In the event that the analytical results of a groundwater sample exceed the designated I.L., the following series of actions will be considered:

- Contact the laboratory to verify that all quality control checks were satisfactory, sufficient sample volume was used; required MDC's were met, etc.;
- Re-analyze Aliquots of the original sample;
- Re-sample the location (Confirmatory sample) to verify the result;
- Increase the frequency of sampling (Mid-Quarter samples) for this location[40];
- Initiate an investigation utilizing Entergy's corrective action program and related resources as appropriate (e.g. site engineering / radiation protection); and
- Initiation of source/ground water remediation techniques commensurate with the potential dose impact analyses and good environmental stewardship.

3.4.1 Proactive Mid Quarter Samples

During the Q4 2010 monitoring period, there were no planned operations that required increased sampling. As such, no proactive mid-quarter samples were collected Post-Q4 2010.

3.4.2 Previous Q3-2010 Investigation Level Exceedances

As indicated in the previous Q3 2010 Quarterly LTM Report, a comparison of the Q3 2010 analytical results to their respective I.L. values shows that the I.L.s were initially exceeded at ten sampling intervals, with five of these intervals exceeding the I.L. during both the Q3 2010 and Post-Q3 2010 sampling events. Three of these I.L. exceedances are still ongoing, and are discussed individually in **Section 3.4.4** below. The remaining seven I.L. exceedances (MW-31-49, MW-31-63, MW-32-59, MW-32-173, MW-39-102, MW-50-42 and MW-67-105) were resolved during the Q4 2010 sampling, as summarized below.

MW-31-49. The Q3 2010 Tritium activity at MW-31-49 increased by a factor of three, which was the highest Tritium activity measured at this interval since the initiation of the LTMP. Following this I.L. exceedance, a second Q3 2010 sample was collected at MW-31-49 which showed a noticeable decrease (thirteen-fold) in activity to a level well below the Tritium I.L. However, the Post-Q3 2010 result was once again elevated above the I.L., and to an activity twice that ever measured in this interval (including the previous Q3 2010 peak). The Post-Q3 2010 peak was

[40] It is noted that Mid-Quarter samples are also proactively obtained when plant operations could potentially result in an increased probability of a release to the subsurface.

immediately followed by a decrease (factor of three) in Tritium activity during the current Q4 2010 quarter, to a level below the Tritium I.L.

These recent peaks in Tritium activity appear related to a somewhat delayed response to the transient RWST/R.O. skid surface spill[41] in Q4 2009[42], as potentially mediated by Retention Mechanisms. Given that the R.O. skid spill, the likely source of these peaks, has been terminated and the Tritium activity quickly returned to pre-release levels in MH-9, an overall, continued decrease to a pre-release Tritium activity is anticipated in MW-31-49. However, the residual impact of the transient RWST/R.O. spill, as mediated through the Retention Mechanisms, may be prolonged as additional future Tritium inputs move through the system (see further discussion below and in **Section 3.4.5**). It is noted that additional sampling intervals in both MW-31 and MW-32 also recorded decreases in Tritium activity to levels below their respective I.L.s during the current (Q4 2010) monitoring period. The decreasing trend observed in these intervals indicates that the source area Tritium activity should continue to approach a pre-R.O. spill Tritium activity in the upcoming quarterly sampling events[43].

MW-31-63. The three Q3 2010 and Post-Q3 2010 data points defined a new Tritium peak at this location, where the Q3 result was increasing toward the peak from lower activities measured in Q2 and Post-Q2 2010, the first Post-Q3 result was at the peak, and the second Post-Q3 sample showed a decrease below both the first Post-Q3 and Q3 2010 activities. This nascent decreasing trend was further strengthened by a nearly two-fold decrease in the current, Q4 2010, Tritium activity to below the I.L. The decrease after the Q3 2010 peak is hypothesized to be in response to the continued dissipation of the transient RWST/R.O. surface spill as it further flushes through the groundwater system. Given that the apparent source of this peak has been terminated and Tritium is a non-sorbing radionuclide, Tritium levels in MW-31-63 appear to be relatively quickly returning to pre-release levels, similar to MW-31-49 above.

In this regard, it is noted that peaks in Tritium activity, likely related to mobilization of historically stored Tritium[44], have also been noted in MW-31-63 since the Q1 2009 sampling event, with somewhat less, but still noticeable variability evident all the way back to the beginning of monitoring. This behavior has also been noted in other sampling depths at this location as well as at proximate locations MW-32 and MW-30, particularly at shallower depth intervals[45].

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[41] The spill involved a rented RWST/R.O. processing skid brought on-site by an outside contractor. As such, this equipment is not an in-place Unit 2 SSC and is no longer on site. This release was first detected during routine 80-10 sampling of MH-9. The Tritium levels were measured at ~85,000 pCi/L in this MH on January 14th and 15th, 2010, and then decreased to 4,650 pCi/L on January 19th, 2010. Typical Tritium levels prior and post-spill were ~1,500-4,000 pCi/L in MH-9. It is therefore likely that Tritiated water entered the subsurface through this storm drain pathway, as well as potentially through the upper portions of the MW-32 installation (see Q1 2010 Quarterly Report, 1/11/11).

[42] Based on forensic research conducted by Entergy, it appears that the date of the spill was November 21, 2009.

[43] It has also been observed that these two recent Tritium peaks, as well as the previous peak in Q4 2009, appear to closely follow noticeable increases in flow into the LCD, and also coincide with a ten-fold increase in the Tritium level in MH-5 VCFD (see **Figure 6B).** These correlations lead to consideration of a potential link between LCD flow and peaks in groundwater Tritium activity.
Recent and ongoing investigations indicate that the increased LCD flow was likely related to particularly high SFP levels associated with dry cask work. Procedures have therefore been put in place to better control pool levels. Because the flow rate into the LCD has decreased back to baseline levels (typically less than 20 ml/day after 10/4/2010), the Tritium activity in MW-31-49 is also expected to decrease, if there is a link as contemplated above (and/or given the transient nature of the RWST/R.O. skid surface spill). Finally, It is also noted that flow into the LCD and MH-5 VCFD is captured, measured and discharged as a monitored releases.

[44] As discussed in the January 7, 2008 Hydrogeologic Site Investigation Report, it has been concluded that portions of the Tritium released prior to Energy's last remediation interdiction (rectifying the Transfer Canal liner weld imperfection in December 2007 - the final identified leak) have been stored in the subsurface (Retention Mechanism(s)).

[45] As discussed in previous quarterly reports, the historic variability in Tritium activity measured in MW-30, 31 and 32 has typically been attributed to the mobilization of Tritium stored in the shallow bedrock and/or within anthropogenic structural features. This storage/Retention Mechanism(s) was confirmed during tracer testing as described in the Hydrogeologic Site Investigation Report prepared by GZA, dated January 7, 2008, and as further supported by more recent tracer data discussed in the Q1 2009 LTM Report. Therefore, while the storage/Retention Mechanism(s) clearly contribute to the observed Tritium variability, it is equally clear that some of this variability is likely attributable to localized transient release events.

Therefore, while the initial Post-Q1 2010 peak at MW-31-63 has been associated with the transient RWST/R.O. skid spill, which had been terminated prior to the second Tritium peak observed in the Q3 2010 and Post-Q3 2010 samples, this subsequent peak is still likely due to the R.O. skid spill through replenishment of the Retention Mechanisms, thus resulting in further releases from these Retention Mechanisms into the groundwater flow regime (i.e. second peak)[46]. Therefore, future Tritium increases at these sampling locations due to the transient RWST/R.O. processing skid spill are still likely, although an eventual, overall decrease in Tritium activity at this location is anticipated.

MW-32-59. The Q1 2010 through initial Q3 2010 samples[47] at this sampling location all exceeded the Tritium I.L. However, a noticeable decrease in Tritium activity was initially observed during the initial Q3 2010 sampling event, followed by a second decrease in Q3 2010 to well below the I.L. for MW-32-59. In spite of this decreasing trend, a subsequent Tritium peak was observed in Post-Q3 2010, with the Tritium activity back above the I.L. and slightly above the initial Q3 2010 result. This subsequent Post-Q3 2010 peak was immediately followed by another decrease in Tritium activity during the current, Q4 2010, quarter to an activity well below the I.L. for this interval (see **Figure 6B**).

Similar to the Tritium I.L. exceedances in multiple MW-31 sampling intervals, this recent Tritium peak is likely attributable to a delayed release from Retention Mechanisms which have been replenished by the transient RWST/R.O. skid surface spill which occurred in Q4 2009. In addition to entering the subsurface through the storm drain system, this spill also entered the MW-32 well vault[48], and may have penetrated the well casings, thus potentially explaining the particularly high Tritium activity observed in this shallowest interval of MW-32. Because the surface spill was transient in nature, as concluded, in part, from the MH-9 data, it is expected that the Tritium activity will continue an overall decrease at this location[49]. However, this expected decrease could be masked by additional future contributions of Tritium from the storage/Retention Mechanism(s), as discussed more fully above for MW-31-63 and possibly seen in the Post-Q3 2010 result.

MW-32-173. The Q2 2010 through Post-Q3 2010 Tritium activities all exceeded the I.L. at this sampling interval, although a decreasing trend in Tritium activity was observed during the

[46] It is also possible that the Post-Q3 2010 peak at MW-31-63 could be related to the increased flow observed in the LCD. The Tritium activity at this location increased in Q3 2010 prior to the increased flow observed in the LCD; but the response timing between the two locations (MW-31-63 and the LCD) is unknown depending on the potential source location. The flow rate in the LCD has decreased to baseline conditions, so the Tritium activity in MW-31-63 is also expected to continue decreasing, if these data trends are related.

[47] The Post-Q2 2010 result was the highest Tritium activity measured at this location (in all MW-32 depth intervals) since the initiation of the LTMP, and exceeded the I.L. by a factor of nearly five.

[48] An initial sample was taken of the water remaining in the MW-32 vault on 2/1/2010. This water exhibited a Tritium activity of 390,000 pCi/L. Subsequent sampling of this water in May 2010 measured residual Tritium levels of ~65,000 pCi/L prior to the water being fully removed from the vault. It is further noted that the water in the vault contained other radionuclides in addition to Tritium. These included Co-60, Sb-125, Cs-134, Cs-137, etc. Therefore, the Q1 2010 groundwater data from wells proximate to, and downgradient of, the MH-9 and MW-32 vault release points were evaluated for detections of these radionuclides; none were found. However, Cs-137 was detected at MW-111 in Q2 2010. While this well is located downgradient of MW-32, no other wells showed detections of Cs-137, or the other radionuclides discussed above, in Q2 2010. Cs-137 at MW-111 and downgradient of MW-111 will be closely monitored in the upcoming quarterly reports.

[49] Inspection of **Figure 6B** indicates that the recent Post-Q3 2010 Tritium peak could also potentially be associated with the increased flow rate (1.5 liters/day average) recently observed in the LCD. Prior to the Post-Q3 2010 peak, the previous two sampling results showed a noticeable decreasing trend in Tritium at this location, which was expected due to the transient nature of the RWST/R.O. spill source, the chemical nature/transport behavior of Tritium, and the rapid decrease in Tritium activity observed in MH-9. The noticeable decrease at this sampling interval (MW-32-59) occurred prior to the increased flow rate measured in the LCD. However, the Post-Q3 2010 sample was collected after the increased flow rate in the LCD was observed, and therefore, could potentially be associated with the Q3 2010 conditions observed at the LCD. The current Q4 2010 sample result is also in agreement with the recent flow rates in the LCD, which have subsided to typical historical rates (<0.1 liters/day) since October 2010. In this regard however, it is noted that while the data trends appear to correlate on a temporal basis, simple correlation does not demonstrate causation.

Q3 2010 and Post-Q3 2010 sampling events. This was followed by another decrease this quarter (Q4 2010) to an activity that is slightly below the I.L. Similar to the other MW-31 and MW-32 exceedances discussed above, the overall increase in Tritium activity at this interval over the previous three quarters was attributed to the transient RWST/R.O. skid surface spill which occurred in Q4 2009. As expected, a slightly delayed Tritium increase and a shallower slope to the increasing trend were observed in MW-32-173 when compared to MW-32-59 and MW-32-149, which provides evidence that this depth interval may be responding to vertically downward migration from above. This conclusion is supported by both the four-fold higher activities measured in intervals immediately above this point, as well as the strong vertically downward gradients exhibited by the bedrock formation at this location. As discussed above, the Tritium activity at this depth interval should continue to decrease as the Tritium activity above decreases (given the transient nature of the spill), but will likely decrease at a slower rate[50]. It is also noted that the expected decrease could be masked by future contributions of Tritium from the storage/Retention Mechanism(s), as discussed more fully above for MW-31-63.

MW-39-102. During the previous (Q3 2010) quarter, the Strontium activity at this sampling interval slightly exceeded the I.L., which represented the highest Strontium activity measured at MW-39-102 since the initiation of the LTMP. Similarly, the sampling interval directly below MW-39-102 (MW-39-124) and the uppermost sampling interval (MW-39-67) at this monitoring location also showed increases in Strontium during Q3 2010. As discussed in the Hydrogeologic Site Investigation Report prepared by GZA, dated January 7, 2008, MW-39 is located near the Legacy IP1 Storm Drain piping, which historically carried water collected in the Unit 1 SFDS. Previous testing along these pipes revealed that numerous sections were compromised and leaking; therefore, the SFDS discharge was rerouted in 1994 after detecting Strontium contamination in the effluent of the SFDS. As such, no active source of contamination was present in the Legacy piping after 1994, but several Strontium peaks were observed in multiple MW-39 sampling intervals since the initiation of the LTMP.

Therefore, releases from storage/Retention Mechanism(s) and/or the sorptive properties of Strontium (desorbs back into groundwater) possibly contributed to these previous peaks and the recent Q3 2010 I.L. exceedance in MW-39-102. It is also noted that in addition to terminating the Strontium contamination in the Legacy piping, the ultimate Strontium source (Unit 1 SFPs) has also been terminated during the defueling operations in 2008. As such, it was anticipated that the Q3 2010 Strontium peak in MW-39-102 (as well as the increases in MW-39-67 and MW-39-124) would likely be transient and return to a typical, lower activity at this interval. As expected, the Strontium activity in MW-39-102 decreased and was below the detection limit during the current (Q4 2010) quarter. Similarly, the Strontium activity decreased below the detection limit in MW-39-124 during this monitoring period; however, a slight increase was noted in the uppermost sampling interval, MW-39-67 over the same time frame. Because the ultimate source for this contamination is terminated, overall long-term decreases are expected in all three sampling intervals; however, future transient peaks may be noted as Strontium is temporarily released from the Retention Mechanism(s) or desorbs into groundwater.

MW-50-42. A slightly elevated Strontium activity was noted at MW-50-42 starting in Q3 2009; with a peak occurring in Q4 2009 and decreasing activities observed in Q1 2010 and Q2 2010. However, the Strontium activity again increased during the previous, Q3 2010, quarter and slightly exceeded the I.L. for this sampling interval[51]. This I.L. exceedance was immediately followed by a decrease in Strontium activity below the I.L. during the current, Q4 2010, quarter.

[50] The previous (Q3 2010 and Post-Q3 2010) sampling period results support this premise, as the Tritium activity decreased by ~1,700 pCi/L in MW-32-149 and only ~500 pCi/L in MW-32-173. Overall, the Tritium activity in MW-32-149 has decreased by ~8,200 pCi/L from Post-Q2 2010 to Q4 2010, while MW-32-173 has only seen a ~950 pCi/L decrease over that time period.

[51] It is noted that these elevated levels in MW-50-42 are still noticeably lower than the Strontium activity in the interval below (MW-50-66).

Furthermore, the Q4 2010 result also represents the lowest Strontium activity observed at this location since Q2 2009.

The Q3 2010 I.L. exceedance (and previously elevated activity) was likely related to a delayed response to the increase in water levels during defueling operation in the Unit 1 SFPs (see MW-50 graph on **Figure 7A**). As discussed above, the Strontium activity exhibited a decreasing trend from Q4 2009 to Q2 2010 prior to the Q3 2010 I.L. exceedance; thus the Q3 2010 result could indicate a contribution of Strontium from the storage/Retention Mechanism(s). Because the probable source is terminated, it is expected that the Strontium activity in MW-50-42 will continue an overall decreasing trend towards pre-defueling levels over the next few quarters. The eventual decrease to pre-defueling levels might extend over multiple quarterly monitoring events due to the sorptive behavior of this radionuclide and the Retention Mechanism(s) discussed previously.

MW-67-105. The Strontium result for Q3 2010 at MW-67-105 exceeded the I.L. and represented the historical maximum Strontium activity measured at this sampling interval (2.6 pCi/L) since the initiation of the LTMP. Furthermore, this Q3 2010 exceedance was preceded by a noticeable increase in Strontium activity during the Q2 2010 sampling event. Prior to Q2 2010, relatively low and stable Strontium levels (typically <1 pCi/L) were observed at MW-67-105, extending back to the first sample collected in August 2007. Following the Q3 2010 peak, the Q4 2010 data showed a reversal of the previously increasing trend, with Strontium activity now decreasing to below the I.L., and also now below the detection limit[52].

Because this riverfront monitoring location is downgradient of Unit 1, the recent peak was likely a response to the Unit 1 SFP defueling operation, as the water containing higher Strontium activity migrated farther downgradient. Because the probable source has been terminated, the Strontium activity is expected to return to the historical, low levels seen from August 2007 through Q1 2010 at this sampling interval. However, future transient peaks may be noted as the perturbation is released from the Retention Mechanism(s) and passes through the system.

3.4.3 Q4 2010 Boundary Investigation Levels

A comparison of the Q4 2010 analytical results for the On-Site Boundary Wells to their respective I.L. values shows that the I.L.s were not met for any of the monitoring locations. Therefore, there was no requirement to further investigate radionuclide activity in these wells. However, monitoring installation MW-40 and MW-51 are being further evaluated on a routine basis, as discussed below.

MW-40 and MW-51. While there have been no historic I.L. exceedances at these two southern boundary locations, and the majority of the data from this quarter (Q4 2010) fall within previous ranges (Tritium activity in MW-40-81 was at the historic maximum, but still below 250 pCi/L), these monitoring locations continue to be evaluated on a routine basis given the sensitivity associated with the southern power block boundary. Even though it is recognized that the peak Tritium levels detected are low (less that 350 pCi/L) and near the lower limit of detection, there appears to be a general correlation in Tritium peaks (seasonal cyclical pattern) at multiple depth intervals in both of these monitoring installations (see **Figure H1** in **Appendix H**). This general correlation is evident in MW-51 during both the previous quarter (Q3 2010) and the current quarter (Q4 2010) as the depth intervals recorded an increase (similar magnitude) in Tritium activity during Q3 2010 and generally exhibited a decrease in Tritium activity during Q4 2010. MW-40 also remained consistent with the overall pattern, but it peaked earlier than MW-51, with the majority of its intervals increasing towards another peak this quarter.

[52] Note that, beginning this quarter (Q4 2010), the laboratory MDC has been increased to approximately 2pCi/l.

An appropriate metric to evaluate whether or not these cyclical trends are due to Tritiated groundwater migration from the power block area is the relative groundwater elevations between these locations and the power block areas where Tritium contamination exists. As discussed at length in the CSM sections of the Site Investigation Report, the southern boundary groundwater elevations are well above those in the power block area. As such, groundwater, and thus Tritium in the groundwater, cannot migrate from the power block to the south; in fact, groundwater is migrating in the opposite direction. This conclusion was previously validated for nine quarters (between Q2 2007 and Q2 2009) through analyses of groundwater elevation contours (see **Figure 5** in the quarterly reports prior to Q3 2009). In addition, starting with the Q1 2009 Quarterly Report, **Figure 5A** is being generated to specifically compare high importance transducer readings to historic maximum and minimum readings. The objective of this analysis is to demonstrate that substantial changes to the on-site groundwater flow field have not taken place and that the CSM remains valid. Multiple sampling zones from both the MW-40 and MW-51 monitoring installations are included in this analysis.

Based on these analyses, as well as the substantial body of data developed over the last 5 years of investigation which underpin our CSM, we conclude, with a high degree of confidence that the low level peaks in the Tritium activities observed in these two monitoring installations are not due to groundwater migration from the power block area. This conclusion has continued to be validated each quarter. However, we do not have a definitive explanation for the observed peaks. Further investigation into other potential mechanisms, such as seasonal atmospheric Tritium washout and seasonal laboratory biases are ongoing.

3.4.4 Q4 2010 SSC Investigation Levels

For the SSC monitoring wells, a comparison of the Q4 2010 analytical results to their respective I.L. values shows that the I.L.s were met at four sampling locations this quarter. The following table summarizes the cases where the I.L.s were met, with these exceedances individually discussed below.

WELL ID	RADIONUCLIDE	RESULT (pCi/L)***	REANALYZED RESULT (pCi/L)	INVESTIGATION LEVEL (pCi/L)
MW-32-149 (Q4 2010)	H3	1,550	NA*	1,000
MW-36-24	H3	2,620	NA*	2,563
MW-41-40	H3	2,430	NA*	1,002
MW-46	H3	3,130	NA*	1,844

* NA indicates that the sample was not reanalyzed.
** ND indicates that the radionuclide was not detected greater than or equal to the MDC and 3 times the 1 sigma uncertainty.
*** A radionuclide is positively detected when the result is greater than or equal to the MDC and 3 times the 1 sigma uncertainty.

MW-32-149. The Q1 2010 through Post-Q2 2010 results at this interval showed a noticeable increase in Tritium activity to nearly ten times the I.L. in the Post-Q2 2010 sample[53]. The Q3 2010 and Post-Q3 2010 samples also exceeded the Tritium I.L. at this interval, but a noticeable decrease in activity was noted during these sampling events. The I.L. was again exceeded at this interval during the current (Q4 2010) quarter, although the recent decreasing trend of Tritium activity continued through Q4 2010. Consequently, the Tritium activity at MW-32-149 has decreased by nearly 85% since the Post-Q2 2010 sampling event.

Similar to the other MW-31 and MW-32 exceedances discussed in **Section 3.4.2** above, this Tritium peak has also been attributed to the transient RWST/R.O. skid surface spill which occurred in Q4 2009. The quick response of this deep sampling interval to the Tritium surface

[53] Only the first sample collected at this location (1/19/2007) showed a higher Tritium activity (10,500 pCi/L) than the Post-Q2 2010 sample results (9,760 pCi/L).

release provides further evidence that the spill may have penetrated the well casings and entered the subsurface immediately proximate to the sampling installation. This conclusion is based on the previously observed behavior of this sampling interval, which had historically exhibited a relatively uniformly decreasing trend for the last three years, absent the peaks observed in shallower intervals[54]. Because the probable source has been terminated, we anticipate that the Tritium activity at MW-32-149 should continue to decease to an activity below the I.L., similar to the other MW-31 and MW-32 intervals discussed in **Section 3.4.2** above. However, as discussed above for MW-32-59, the future behavior of this sampling interval is in question due to possible contributions from the storage/Retention Mechanism(s) and will therefore be specifically evaluated further with the additional data acquired during the upcoming quarterly monitoring round.

MW-36-24. The Q4 2010 Tritium activity at this sampling interval slightly exceeded the I.L. Additionally, the Tritium I.L. was exceeded during the Q2 2010 sampling event[55]. However, the Tritium activity decreased to a level approximately one order of magnitude below the I.L. between these two exceedances (Q3 2010). Based on the downgradient well location, the likely source of these Tritium peaks was the transient surface spill related to the temporary rental RWST/R.O. processing skid. Similar to the Q3 2010 result, the Tritium activity is expected to relatively quickly decrease below the I.L. at MW-36-24 because the probable source for the recent Q4 2010 peak is terminated and Tritium is a non-sorbing radionuclide. However, as discussed previously, future contributions from Retention Mechanism(s) may potentially create additional transient peaks at this sampling interval; as such, it will be further evaluated based on the additional data obtained during the upcoming quarterly monitoring round.

MW-41-40. The Tritium I.L. in this well was exceeded by nearly a factor of three during both the previous (Q3 2010) and current (Q4 2010) quarters[56]. A noticeable increase in Tritium activity to approximately 60,000 pCi/L and 300,000 pCi/L was also concurrently observed in Manhole A2 during routine 80-10 Effluents Program sampling in Q3 2010 and Q4 2010, respectively. MW-41 is located directly adjacent to this storm drain system, between manholes A2 and A4. The transient Q3 2010 peak in MH-A2 occurred in early July 2010 (7/7/2010); however, the Tritium activity rapidly decreased (<1 week) to a baseline activity seen within this storm drain system. Conversely, the Q4 2010 peak was prolonged, with elevated Tritium activity observed for an extended time period (10/5/2010 – 11/10/2010) during this quarter. Additionally, an increase in Tritium activity was also observed downstream in this storm drain system at manhole A4 during both monitoring periods. Prior to these peaks, the Tritium activity in these manholes was consistently below 1,500 pCi/L for an entire year.

However, an additional prior Tritium peak was observed in MH-A2 in Q2 2009, with a concurrent Tritium I.L. exceedance in MW-45-42. This well is located immediately adjacent to MH-A2. Both locations exhibited rapid decreases of Tritium activity (in MW-45-42 to levels below the I.L.) during the following, Q3 2009, quarter. This initial peak in both MW-45-42 and MH-A2 initiated a series of investigations into the correlation and underlying cause of both the IL exceedance in the monitoring well as well as the increased Tritium in the manhole. The investigations quickly identified a likely cause of both the monitoring well and manhole peaks as associated with higher levels of washout entering the FSB building roof drain leading directly

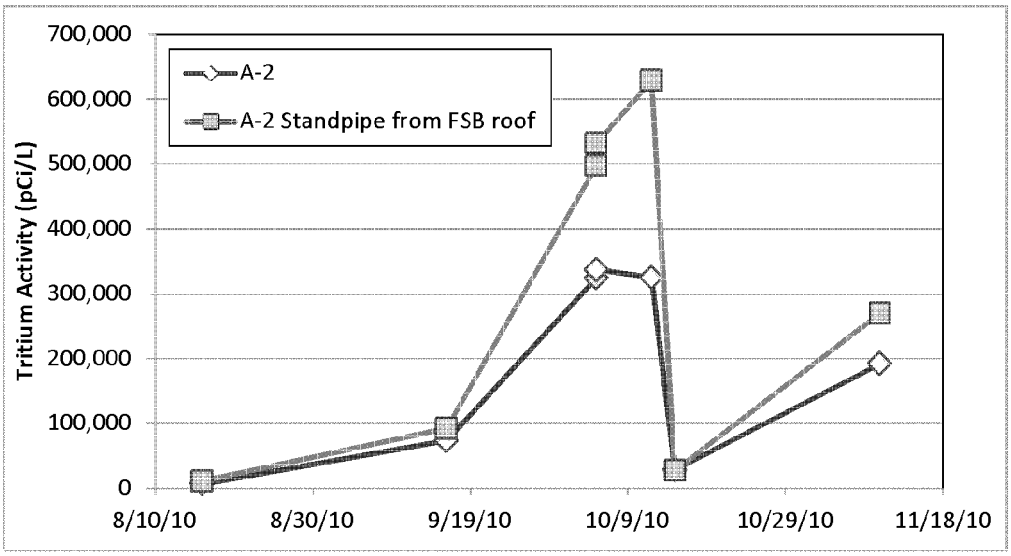
[54] It is also noted that the sampling interval immediately above this interval, MW-32-85, did not exhibit a Tritium peak in Q1 2010; however, the Tritium activity increased during Q2 2010 through Q4 2010 to levels slightly below the Tritium I.L.

[55] It is also noted that the Tritium activity also increased in both of the deeper sampling intervals at this location (MW-36-41and MW-36-52) during the Q2 2010 sampling event. An overall, slightly decreasing trend was noted from Q2 2010 to Q4 2010, following the Tritium peaks at both intervals.

[56] The Tritium activity slightly decreased from Q3 2010 to Q4 2010. A subtle increase in Tritium activity was also noted in the deeper sampling interval (MW-41-63) at this monitoring location during Q3 2010. Similar to MW-41-40, a slight decrease in Tritium activity was also noted at this depth from Q3 2010 to Q4 2010.

into MH-A2 when the vent fan is not operating. Under specific climatic conditions, FSB evaporation can condense on the roof and be transported into the storm drain system via rain water.

The more recent Tritium peaks in Q3 and Q4 2010 provided additional information which helped inform further investigations. As one step in the investigative process to rule out a leak in a SSC, a standpipe was constructed which solely receives inflow from the FSB downspouts and isolates this water from other water sources to MH-A2. The Q3 and Q4 2010 sample data from this standpipe demonstrate, as shown below, that the recent Tritium activity within MH-A2 is directly proportional to the discharge from the FSB roof.



Based on the investigations and associated data collected, it has been concluded that the elevated Tritium levels detected in MH-A2 and A4 are due to the FSB roof condensate. Consequently, some of this highly Tritium-laden water was in all probability released into the groundwater from the storm drain system[57] and thus likely resulted in the Q3 2010 and Q4 2010 Tritium peaks observed in MW-41-40. Moreover, it would also then follow that the Tritium peaks seen in MW-46 and MH-B1, discussed below, as well as the earlier peak in MW-45-42, are all associated with the above described mechanism. As such, these monitoring well peaks in Tritium activity do not indicate a new leak from a SSC. Notwithstanding the above analyses, the behavior of this interval will be specifically evaluated further based on the additional data obtained during the upcoming quarterly monitoring rounds given that the Unit 3 FSB fan is in the process of being repaired.

MW-46. The Tritium activity at this monitoring location slightly exceeded the Tritium I.L. in the previous (Q3 2010) monitoring period. An additional increase was also noted during the current, Q4 2010, quarter to an activity that is nearly two times the Tritium I.L. and the second-highest activity historically measured at this location. MW-46 is located downgradient of MH-A2; therefore, this ongoing Tritium peak is likely related to washout entering the FSB building roof drain, as discussed above under MW-41-40. Similar to MW-41-40 and MH-A2, no other radionuclides were detected at MW-46 during both the Q3 2010 and Q4 2010 monitoring

[57] It is noted that the Tritiated water vapor evaporating from the SFP is a permitted release through the Plant Vent located atop the vapor containment building. Analyses were conducted to account for this release to the FSB roof in the dose computations. This same Tritium is therefore "double counted" because it has again been included in the storm drain and groundwater portions of the dose computations.

events. This monitoring location will be specifically evaluated further with the additional data acquired during the upcoming quarterly monitoring rounds.

MH-5 VCFD, B-I and B-6. The Unit 2 foundation drains which discharge into MH-5 VCFD, along with similar drains for Unit 3 which discharge into Manholes B-1 and B-6, form an integral part of the early leak detection monitoring network.

While the Q4 10 data showed that the MH-5 VCFD Tritium activity remained at baseline levels, the previous quarter (Q3-2010) showed a clear increase in Tritium activity (approximately by an order of magnitude) over base line levels[58] (**see Figure 6B**)[59]. The other radionuclides analyzed (e.g. Strontium, Cesium, Cobalt) have previously been non-detect, and have remained non-detect through the Q3 2010 Tritium peak, and into Q4 2010, at MH-5 VCFD.

During quarter Q4 2010, the Unit 3 Tritium activity in manhole B-1 decreased by nearly one order of magnitude[60] as compared to the previous, Q3 2010 results, which exhibited historical maximum activities at this monitoring location. The Q3 2010 peak was consistent with the transient increase in Tritium activity also observed in MH-A2 during that period (See discussion above under MW-41-40). However, unlike the Q4 decrease observed in B-1, there was a second peak observed in MH-A2 and the Tritium activity seen at monitoring locations MW-41-40 and MW-46 remained elevated during Q4 2010. Given the continued activity in MH-A2, the reason for the decrease in Tritium activity in B-1 is not clear. Similar to the historical sampling events at B-1[61], Cesium was also detected in this manhole at an activity comparable to the Q2 2010 and Q3 2010 results[62]. These Cesium levels are well below the 80-10 Effluents Program reporting limits, and are believed to be associated with Unit 1 contaminated construction backfill remaining in the vicinity of the Unit 3 VC Building. The remaining radionuclides were all non-detect during the current, Q4 2010, sampling event at B-1.

All radionuclides (including Tritium) were non-detect at B-6 during the Q4 2010 sampling event.

Leak Collection Device (LCD). The flow rate into the Unit 2 Leak Collection Device (LCD) remained at baseline during the current, Q4 2010, monitoring period. This return to baseline conditions, in October 2010, followed a clear increase in the volume of water collected by the LCD during the previous (Q3 2010) quarter, beginning on July 5, 2010[63]. The flow rate averaged approximately 1.5 L/day over the quarter[64]. Investigations indicated that the increased flow appeared attributable to atypically elevated water levels in the fuel pool as associated with dry cask work. Limiting such increases in pool water elevation in Q3 appeared to result in a marked decrease in the LCD flow rate back to levels generally consistent with the baseline of less than approximately 0.02 L/day at the very beginning of Q4 2010. Based on these observations, a figure (**Figure 6B**) has been included in this quarterly report (first included in the Q3 2010 quarterly report) which visually presents both the U2 Leak Collection Device

[58] After the Q3 10 increase, the Post-Q3 2010 sampling data from only 10 days later show the Tritium activity in MH-5 VCFD had already returned to the previous baseline levels.

[59] Potential correlations between the Q3 increased MH-5 VCFD Tritium activity and the increased LCD flow rate and increased activity in proximate monitoring wells MW-31and MW-32 are discussed in **Section 3.4** of the Q3 2010 Quarterly Monitoring Report.

[60] It is noted that the current Tritium activity is still elevated (approximately two-fold) when compared with the baseline activity in this manhole.

[61] A total of 10 samples have been collected from Manhole B-1 and low levels of Cesium has been positively detected in 6 of these samples.

[62] At manhole B-1, the Cs-137 activity slightly decreased from the previous quarter (Q3 2010) to the current, Q4 2010, quarter.

[63] Potential correlations between the Q3 increased LCD flow rate and the increased Tritium activity in proximate monitoring wells MW-31and MW-32, as well as MH-5 VCFD are discussed in **Section 3.4** of the Q3 2010 Quarterly Monitoring Report.

[64] The LCD collected approximately 50 liters of water during the July to October 2010 time frame, which is greater than the total volume of water collected during the previous 3 year period (April 2007 through June 2010). In this regard, however, it is noted that all of the water collected by the LCD is fully contained and does not enter the groundwater regime.

data and the historical Tritium data for the sampling intervals located within the Unit 2 Tritium plume boundaries.

U1 NCD AND U1-SFDS. Sampling of the Unit 1 North Curtain Drain (U1-NCD) and the Unit 1 Sphere Foundation Drain Sump (U1-SFDS) are currently included as part of the Long Term Monitoring Program. These drains have been documented to capture a large proportion of the Strontium leakage from the Unit 1 SFPs, and continue to collect groundwater containing Strontium and Cesium and direct it to treatment[65]. These drains have also historically been assumed to collect some groundwater contaminated with Tritium from the Unit 2 SFP. This conclusion was validated by the tracer test conducted as part of the hydrogeologic site investigation (see the Hydrogeologic Site Investigation Report prepared by GZA, dated January 7, 2008).

Visual inspection of the U1-SFDS Tritium data demonstrates that the Q4 2010 activity continues the relatively stable trend (within an overall decreasing trend) in this drain over the last five quarters. The Q4 2010 Tritium activity in U1-NCD decreased by a factor of four from the peak established in Q1 and Q3 2010[66], and has reestablished the overall decreasing trend evident back to the middle of 2008, when LTMP data collection began.

Strontium data from these drains continues to show overall decreasing trends since the completion of U1 SFP defueling; as such, both drains have generally reached the pre-defueling Strontium levels, as summarized on **Figure 7A**.

3.4.5 Conclusions - Boundary and SSC Leak Detection Monitoring

Recognizing that measured activities in the Off-Site and On-Site Boundary Wells have remained below I.L. levels, this overall data set continues to demonstrate that radionuclides are migrating toward the Hudson River to the West, and are not migrating off of the property to the North, East or South, as expected given the measured groundwater flow directions from the property periphery toward the power block area.

Given the analyses discussed above, there is also no compelling reason to believe that any new unidentified leaks have developed in the SSCs monitored relative to Unit 2 or 3. As discussed in **Section 3.4.4** above, and based on a series of investigations beginning in 2009, we have concluded that the increases in Tritium activity in manholes A2 and A4 are related to SFP condensation which collects on the FSB roof when the exhaust fan is not operating[67]. It has been further concluded that this condensation is also the underlying cause of the Tritium I.L. exceedances and peaks observed in both nearby and downgradient sampling locations, MW-41-40, MW-46 and B-1, respectively, as well as the 2009 peak in MW-45-42, located immediately adjacent to MH-A2. As such, these peaks in Tritium activity do not indicate a new leak from a SSC.

Additionally, as discussed in the Q1 2010 Quarterly Monitoring Report, a peak in Tritium activity was measured in MH-9 during routine 80-10 Effluents Program sampling. The Q1 2010 sample from the upper-most interval of MW-32 (MW-32-59) also exceeded its I.L with the highest

[65] Prior to the Unit 1 SFP defueling, the U1-NCD and U1-SFDS drains were collecting approximately 20-40 times more Strontium than was discharging through groundwater into the Hudson River. Additionally, these drains were particularly effective during defueling and captured approximately 300-350 times more Strontium during this time frame. Currently, these drains are removing approximately 10 times more Strontium than is discharging into the Hudson River from groundwater.

[66] The Q3 2010 Tritium result in U1-NCD increased by nearly a factor of three relative to Q2 2010, and was the highest activity measured in this drain to date. The underlying cause for this peak in the U1-NCD is currently unclear.

[67] It is noted that the Tritiated water vapor evaporating from the SFP is a permitted release through the Plant Vent located atop the vapor containment building. Analyses were conducted to account for this release to the FSB roof in the dose computations. This same Tritium is therefore "double counted" because it has again been included in the storm drain and groundwater portions of the dose computations.

Tritium activity measured since the initiation of the LTMP. After further investigation by IPEC, it appears that these Tritium increases originated from a Q4 2009 localized, transient surface spill just outside the Unit 2 SFB. The spill involved a rented RWST/R.O. processing skid brought on-site by an outside contractor[68]; the temporary leakage likely emanated from connection hoses during or just after the filtration process. It appears that this transient release entered both MH-9 and the well vault for MW-32 (which employs a drain emptying into MH-9), and may have also penetrated the MW-32 well casings. Both the storm drains and the well vault likely provided pathways for radionuclides to enter the subsurface. The Q2 2010 and Post-Q2 2010 data showed further I.L. exceedances both at deeper intervals (MW-32-173) and farther down gradient (MW-36-24 and MW-50-42), as would be expected as the spill worked its way through the groundwater flow regime. These additional Tritium exceedances were also attributed to this transient R.O. skid surface spill. The Q3 2010 and Post-Q3 2010 data demonstrated that the downgradient Tritium activities in MW-36-24 and MW-50-42 quickly returned below the I.L.; however, the Tritium levels in multiple "near source" sampling intervals (MW-31-49, MW-31-63, MW-32-59, MW-32-149, and MW-32-173) still exceeded the Tritium I.L. The Tritium activity in the majority of these MW-31 and MW-32 intervals (MW-31-49, MW-31-63, MW-32-59 and MW-32-173) decreased below the I.L. during the current, Q4 2010, monitoring round. However, a second Tritium I.L. exceedance was noted in MW-36-24, which is likely related to delayed input from Retention Mechanism(s).

Based on the above analyses, it is clear that the LTMP has provided valuable data aiding in the identification of releases to the groundwater.

Finally, increased leakage measured in the Unit 2 LCD from July 2010 to October 2010 appears attributable to raised pool levels within the U2 SFP during various dry cask fuel transfer procedures. While all the flow into the LCD is captured and released through monitored pathways, recent (Q3 2010 and Post-Q3 2010) peaks seen in MW-31-49, MW-32-59 and MH-5 VCFD could possibly be correlated with this increased flow rate. Based on the most-recent Q4 2010 data (October 2010 through December 2010), the flow into the LCD has decreased back to baseline levels of less than 0.02 L/day. This decrease appears to be in response to the post-investigation limiting of pool water elevation during dry cask work. Based on the Q3 2010 observations, Entergy has initiated investigations into potential leak pathways.

The overall U2 plume[69] has continued to generally exhibit overall, long-term reductions in Tritium activity since termination of the identified Unit 2 SFP leaks. While Q2 2010 increases in Tritium activity were observed in multiple monitoring locations within the delineated U2 plume[70], these data were consistent with both the Q4 2009 transient RWST/R.O. processing skid surface spill and the overall historic variability observed in Tritium levels attributed to episodic releases of Tritium stored in the subsurface via natural and anthropogenic Retention Mechanisms[71]. Reductions in Tritium activity have now been seen in numerous Unit 2 monitoring locations during Q3 2010 and Q4 2010.

Relative to the Unit 1 Strontium data, increased leakage was anticipated during final fuel removal from Unit 1 SFPs. This leakage was readily detected as increased Strontium in the

[68] As such, this unit is not an in-place, plant SSC, and is no longer on site.

[69] It is noted that there is no Tritium plume associated with Unit 3.

[70] It is noted that a one-quarter increase was observed in the total Tritium activity of the Unit 2 plume during Q2 2010, as elucidated in **Figure G-17**. This Tritium mass increase was attributed to the transient RO. skid surface spill The Q3 and Q4 2010 data show reductions from the Q2 2010 level, with resumption of the previous decreasing trend in the total plume activity (see **Figure G-17**).

[71] This conclusion is supported by the tracer data and other analyses discussed in Section 3.6 of the Q1 2009 Long Term Monitoring Report. These Retention Mechanisms are further discussed along with the CSM in the previously cited Hydrogeologic Site Investigation Report. However, given the more recent behavior observed in the Unit 2 Leak Collection Device (LCD) data, as well as previous data (see Section 3.6 of the Q1 2009 Long Term Monitoring Report), additional investigations/data evaluations are underway to further rule out potential Unit 2 SFP leak mechanisms.

groundwater by the Long Term Monitoring Program. The initial near-pool and subsequent downgradient Strontium increases have been routinely monitored as summarized on **Figure 7A**. Currently, the near-pool and more downgradient monitoring locations have generally returned to pre-defueling Strontium levels, with outliers (such as MW-37-40[72]) expected to continue to show further decreases towards pre-defueling levels in the upcoming quarters. Additionally, the near-river sampling intervals (MW-67-39, MW-67-105, and MW-62-138) have recently exhibited an increase in Strontium activity, as the perturbation migrated downgradient.

Overall, GZA believes that further monitoring will continue to demonstrate the decreasing long term trends historically observed in groundwater activities over time for both the Unit 1 and Unit 2 plumes given the source interdictions completed by Entergy. However, ultimate confirmation of the rate of decrease will require monitoring over a number of years to demonstrate continued depletion of Tritium and Strontium from the Retention Mechanisms originally sourced by the historic Unit 2 SFP Tritium Unit 1 SFPs Strontium leakages, as well as the more recent Strontium leakage due to Unit 1 defueling and impacts associated with a number of recent, localized, transient spill events. It is further noted that quantification of these overall radionuclide reductions will require that ranges in seasonal variation be adequately reflected in the monitoring data and any further additions of radionuclides to the Retention Mechanisms, such as through the transient spills discussed above, be dissipated from the geohydrologic flow regime.

Given the above cited constraints, it is premature to begin recalibrating the I.L.s, which were originally established at the beginning of the LTMP in 2007. Since inception of this program, it has been observed that I.L.s have been routinely exceeded in a number of cases where subsequent data have demonstrated that no new leaks or spills have occurred. The majority of these cases occur where the radionuclide levels are generally low and/or near their detection limits. It appears that data variability, likely due to seasonal precipitation influences and local variations in flow paths and/or other in-situ processes, is the primary cause of these false positives[73], particularly pursuant to Tritium. Therefore, the basis upon which the I.L.s are computed needs to be re-evaluated in light of the long-term natural transient variability of the groundwater system in response to precipitation events, etc. Furthermore, while re-evaluation/re-setting of I.L.s is a clear goal, it is still premature given the lack of sufficient data. This is particularly true given the recent behavior in Strontium levels due to the Unit 1 defueling (see **Figure 7A**) and the transient Tritium spills discussed above and in the Q1 2009 LTM Report. As such, the current I.Ls will remain in effect while a sufficient data base is acquired to allow better quantification of the natural (non-leak related) variability in the data.

We draw five major conclusions from the above summarized data and analyses:

1. The current CSM for the IPEC site provides a good basis for the design of the Long Term Monitoring Program;
2. The procedures and rationale used for selecting monitoring locations for leak detection have been further validated given the clear detection of the confirmed Unit 1 SFPs increased leakage during fuel removal, the transient Q1 2009 U1 FSB distillation tank valve leak (see Q4 2009 Quarterly LTM Report for further discussion), the Tritium

[72] It is noted that the 40 foot interval in the MW-37 monitoring installation is showing a delayed decrease in Strontium levels as compared to the depth intervals above and below. This response time lag is likely a result of the lower hydraulic conductivity (by two to three orders of magnitude) of the bedrock accessed by this depth interval.

[73] In this context, "false positive" does not refer to an error in the actual data value. Rather, it means that the I.L exceedance in question did not result from a new release. While I.L.s are meant to be set at conservatively low values, and thus "false positives" should be expected, a corollary objective is to set I.L values which keep the number of false positives low enough to eliminate development of complacency.

increases in Manhole A2 in Q2 2009, Q3 2010 and Q4 2010, and the Q4 2009 RWST/R.O. processing skid surficial release to MH-9[74];

3. Higher than normal water levels in the Unit 1 SFPs during defueling resulted in increased activities in the groundwater proximate to, and downgradient of those structures, and in Strontium levels following this documented increased release rate take longer to materialize in the groundwater than might otherwise be expected[75];
4. Localized, transient Tritium spills have a pronounced short term impact on Unit 2 Tritium plume activity, with potential longer term impacts via Retention Mechanism(s); and
5. Even with the somewhat increased Tritium levels still being observed in downgradient wells due to the transient RWST/R.O. skid surface spill, the amount of all radionuclides being released through the groundwater pathway is still small (<0.01%) compared to permitted levels of radionuclides discharged to the river through the Discharge Canal.

3.5 Plume Natural Attenuation Monitoring

The fourth and final objective of the Long Term Monitoring Program is to evaluate if the groundwater plumes identified on-Site demonstrate overall reductions in total activity over time, as is consistent with the requirements of Monitored Natural Attenuation (MNA), the selected remediation for the IPEC Site[76].

Given the likely ages of the SFP leaks identified and characterized during the hydrogeologic investigation, it is probable that the Unit 2 (Tritium) and Unit 1 (Strontium) plumes had reached steady state conditions prior to the beginning of the LTMP. Given that: (1) the identified leaks in the Unit 2 SFP have all been previously repaired (the last leak repaired in 2007) and; (2) the water in the Unit 1 West Pool underwent intensified demineralization (beginning in April 2006 with a reduction in Strontium levels of over 95 percent) and the pools were fully defueled and drained in, one might expect that the plumes should have started to markedly attenuate toward zero with time. Both plumes have in fact generally shown significant levels of attenuation, when they are viewed in their entirety and past release events and expected seasonal variability in the sampling data are accounted for. However, the attenuation has not been as rapid as we originally anticipated during time frames subsequent to the source interdictions implemented by Entergy.

In the case of the Unit 2 Tritium plume, levels have dropped markedly from the highest levels measured during the two-year hydrogeologic investigation. However, the rate of Tritium decrease with time has decreased. While the decreasing trend since source interdiction is clear, the rate of reduction has been difficult to predict due to the impact of natural geologic and anthropogenic Retention Mechanisms. These subsurface features have trapped and stored Tritium that was released during historic Unit 2 SFP leaks, and are still likely releasing this Tritium to the groundwater flow regime in an episodic manner after the physical leaks have been terminated. This conclusion is consistent with the original CSM presented in the Hydrogeologic Site Investigation Report, as further supported by the tracer test data in that report as well as subsequent tracer data, as described in Section 3.6 of the Q1 2009 Quarterly Monitoring Report, dated July 2, 2010. In addition, trend identification is further complicated by impacts associated with localized transient releases (most recently, the RWST/R.O. processing skid surface spill). As described above, these transient spills appear to have resulted in a number of

[74] Additionally, the recent peaks in MW-31-49 and MW-32-59 could possibly be related to the recent (July 2010 through October 2010) increased leakage rates at the Unit 2 Leak Collection Device.
[75] Given the proximity of monitoring installations to documented release events, the delay in release arrival is likely due primarily to Strontium partitioning and the time required for leakage to traverse anthropogenic features.
[76] The selection of MNA as the remediation for the Site is more fully discussed in the Hydrogeologic Site Investigation Report.

Tritium peaks (increase and then decrease in Tritium activity) proximate to the spill, with still increasing trends in Tritium activity in a number of downgradient wells. As such, these increases do not appear to be indicative of a new leak in the Unit 2 SFP. Further discussion of this quarter's data pursuant to evaluation of the Unit 2 Tritium plume MNA is provided in **Section 3.5.1** below.

Relative to the Unit 1 Strontium plume, Strontium levels should drop more slowly than Tritium levels. This is because, in addition to the Retention Mechanisms discussed above for Tritium (which also apply to Strontium), Strontium also undergoes partitioning whereby this radionuclide is adsorbed from the groundwater onto solid surfaces (both geologic and anthropogenic). When the input of Strontium to the groundwater is reduced (such as via the initial fuel pool demineralization and subsequent decommissioning) the solid surfaces desorb the "stored" Strontium back into the groundwater, thus maintaining Strontium levels. Strontium partitioning is therefore expected to substantially slow plume attenuation. Despite partitioning effects, some plume attenuation was observed in response to pool demineralization prior to defueling, particularly proximate to the pool. However, defueling of Unit 1 resulted in a temporarily increase in the leakage rate of West Pool water into the formation. This was expected based on previous work on the Unit 1 SFPs, but was unavoidable given the requirement to raise the pool level for fuel rod removal[77]. The increased leakage rate had resulted in a noticeable increase in Strontium levels in the immediate vicinity, and downgradient of, the fuel pool. However, as more currently observed, the near-pool and more downgradient monitoring locations have generally returned to pre-defueling Strontium levels, with outliers expected to continue to show further decreases towards pre-defueling levels in the upcoming quarters, as discussed further in **Section 3.5.2** below.

3.5.1 Unit 2 Tritium Plume Attenuation

Qualitative Evaluation

From a qualitative perspective, a reduction in overall Tritium activity in the Unit 2 plume can be seen through a comparison of the Q4 2010 delineated plume boundary (**Figure 6A**) to those in early LTMP quarterly reports (2007 and 2008). Not only have Tritium levels within the plume generally shown an overall, long-term decreasing trend, but the reductions over the more recent quarters, downgradient of the discharge canal, have become particularly evident in the delineated, shaded bounds of the plume. This quarter continues the trend where the shaded plume[78] no longer extends to the river as it did in previous quarters through 2008. Additionally, the rolling average Tritium activity in MW-111, indicative of the core of the plume, has shown an overall decrease by a factor of nearly two over the last two years (from 70,150 pCi/L in Q1 2009 to 38,240 pCi/L this quarter, (Q4 2010), and by nearly an order of magnitude since tracking of the plume began. This trend over time has been summarized on **Figure 6A**, which is a compilation of the quarterly Tritium plume maps as well as that from the Investigation Report.

[77] As of late 2008, all the fuel rods have been removed from the Unit 1 SFPs and the pool water has been drained. As such, the Unit 1 SFPs is no longer an active source of radionuclides to the subsurface.

[78] The plume shading on **Figure 6** demarks the estimated boundary that separates Tritium levels greater than 5,000 pCi/L from those below this value, and provides a reasonable demarcation level for illustrating plume geometry and temporal variation. Although this value equates to one-quarter of the drinking water standard for Tritium, GZA emphasizes that drinking water standards (USEPA MCLs) do not apply to the IPEC property given that there are no drinking water sources on or proximate to the site. Where yearly rolling average radionuclide activity data were available for multiple depths at a given location, GZA used the highest value to develop plume delineations. This is a typical approach to represent three-dimensional contaminant data sets on two-dimensional maps.

Mann-Kendall Quantitative Analysis

To more quantitatively evaluate MNA progress, a Mann-Kendall analysis, as referenced in USEPA Guidance for Data Quality Assessment – Practical Methods for Data Analysis,[79] was performed on the Tritium levels measured through Q4 2010 at monitoring locations associated with the IP2-SFP and downgradient Unit 2 Tritium plume[80]. Each of the vertical monitoring intervals at each monitoring installation was analyzed separately. In general, only data collected after final completion of the multi-level installation[81] was used. However, there were a number of exceptions to this generalization where open borehole and/or borehole packer testing data were also used. These data were incorporated where possible given the importance of early time data (proximate to when documented leaks were still active). Additional, more detailed discussion relative to the basis for including these data is provided in Section 3.6 of the Q1 2009 Quarterly LTM Report.

Graphs showing the variation in Tritium concentration over time in the immediate vicinity of the Unit 2 SFP are presented as **Figures G-1**, **G-2** and **G-3** in **Appendix G**, for MW-30, 31 and 32, respectively. Additional graphs are also presented in the appendix for the other monitoring locations downgradient of the Unit 2 SFP (see **Figures G-4** through **G-14** for MW-33 through 37, 42[82], 49, 50, 53[82], 55 and 111) and downgradient, river boundary wells (see **Figures G-15** and **G-16** for MW-66 and 67, respectively). The Mann–Kendall analyses for the individual monitoring points are summarized on **Table G-1** in **Appendix G**. The table includes the results of the analysis for each depth interval ("well") at each of the multi-level monitoring locations enumerated above. The table is color coded, with green shading designating wells showing a decreasing trend, yellow for no trend, and red for an increasing trend.

Comparison of **Table G-1** for Q4 2010 to that from Q3 2010 indicates that there have been no changes, with the exception of MW-42-49 which has changed to a decreasing trend from a no-trend designation. Of the 32 non-river-boundary intervals included on the table for Q4 2010, approximately one-half (18) show a decreasing trend, one more than last quarter[83]. It is important to note that this group of "decreasing wells" includes all those located within the core

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[79] USEPA Guidance for Data Quality Assessment – Practical Methods for Data Analysis, EPA QA/G9, QA00 UDATE; EPA/600/R-96/084, July, 2000.

[80] The Mann-Kendall statistical technique was initially chosen because it is particularly well suited for data sets with a limited number of points. The method was subsequently retained because it is also a non-parametric analysis and therefore does not introduce bias by presupposing any particular shape for the trend curve. In addition, the method is robust with respect to outliers, which allows it to handle the variability inherent in the data set. Finally, the method tolerates non-uniform sampling frequencies. This is important because while the sampling frequency is typically quarterly, more frequent samples are proactively taken when a scheduled operation carries an increased risk of potential release, and also when something unexpected is observed that could indicate a new leak or spill.

[81] The majority of the boreholes were completed as a multi-level installation. These multi-level completions were designed to segregate the borehole length into individual sampling zones with depth. The sampling zones were generally established to coincide with the more productive zones of the fractured bedrock and overburden (both natural soils and backfill). These sampling zones were then isolated from each other with various types of seals placed in the open borehole. The objective of the seals is to prevent vertical flow through the borehole and thus establish the same conditions in the formation which existed prior to the drilling of the borehole. As such, the Tritium data is considered depth-discrete. It is noted that the multi-level installations at some monitoring locations were removed and replaced with upgraded systems, such as for the monitoring installation at MW-32.

[82] MW-42 and MW-53 are located downgradient of the Unit 1 SFPs, rather than the Unit 2 SFP. However, these two wells were included in the analyses due to the long-standing hypothesis that the Unit 2 SFP contributes Tritium to the Unit 1 groundwater flow regime via vadose zone transport (see the graphic representation in **Figure 6** herein and the discussion in the Hydrogeologic Site Investigation Report). It is noted that any decreasing Tritium trend in this area due to the termination of leaks from the Unit 2 SFP could be masked by increased leakage of Tritiated water from the Unit 1 SFPs up through the completion of defueling in November 2008, and then thereafter via the Retention Mechanism(s) and localized transient releases, as described above.

[83] The Q3 and Q4 2010 Mann-Kendall analysis designated four increasing trends to non-river boundary monitoring intervals. Only two of these monitoring intervals exhibited increasing trends during the previous quarter. The shift to additional wells with increasing trends is consistent with the anticipated impact of the RWST/R.O. skid spill given that these newly designated "increasing trend" intervals are located in the vicinity of the spill , have noticeable increases in Tritium activity since Q4 2009 (date of transient release), and exhibited a "no trend" status prior to this transient surface spill.

of the plume with the highest Tritium activities (MW-30-69, MW-33 and MW-111). These high-activity wells better represent overall plume behavior because they encompass a great percentage of the Tritium activity in the plume. For the river boundary monitoring intervals, slightly less than one-half (4 of 9) show a decreasing trend, the same as last quarter[84].

Notwithstanding the above, it is noted that the Mann Kendal analysis is becoming increasingly less useful for evaluating the behavior of the plume in response to the termination of the identified leaks in the Unit 2 SFP, the reason these analyses were implemented. This is primarily due to the impact of two localized, transient Tritium surface spills[85], the most critical of which is the RWST/R.O. skid spill. These spills have been shown to result in increases in activity, which, while valid measures of plume behavior, impair the ability of the trend analysis to serve as a measure of the effectiveness of Unit 2 SFP leak identification and termination, the intended purpose of this analysis. Due to these spills, a number of wells have transitioned from decreasing trend, to no trend to increasing trend. As such, the practice to date of providing a discussion of each monitoring interval exhibiting a no trend or increasing trend is being suspended, starting with this quarter (Q4 10[86]), until the spills have flushed through the groundwater system. The summary table and the individual interval Tritium plots are still provided in **Appendix G**.

Tritium Plume Total Activity Analysis

Another method to analyze plume behavior is to compute the total Tritium activity in the plume at multiple snapshots over time. This procedure[87] was implemented for each quarterly LTMP sampling round from Q2 2007 to Q4 2010. In addition, the bounding Tritium concentrations from Figure 8.1 of the Hydrogeologic Site Investigation Report[88] have also been included as a starting point for the graph. These data are summarized as a histogram on **Figure G-17** in **Appendix G**.

As can be seen from the figure, the total Tritium activity in the plume downgradient of the Unit 2 SFP has shown a distinctly decreasing trend over time. After a noticeable increase in total Tritium mass in Q2 2010[89], the total Tritium activity noticeably decreased during Q3 2010, and resumed the historical trend during the current (Q4 2010) quarterly monitoring period. The temporary, total Tritium activity increase observed during Q2 2010 appears to have been caused by the transient surface spill related to RWST/R.O. skid operations. As such, the total Tritium activity is expected to continue its overall decreasing trend, similar to the current (Q4

[84] Closer inspection of the current "no trend" river boundary wells (MW-66-21, MW-67-219, MW-67-276 and MW-67-323) reveals that the normalized test statistic decreased from Q3 2010 to Q4 2010 at all four intervals. As such, these intervals are all statistically shifting towards the "decreasing trend", which is currently defined at a 95% confidence interval, with the addition of the current, Q4 2010, monitoring data.

[85] In addition, effectiveness is further impacted by a limitation of the Mann Kendall analysis method, itself. This method only evaluates the number of increases relative to decreases, and does not weight the analysis relative to the magnitude of each change. Therefore, once a clearly decreasing trend, even of substantial magnitude, has reached a nearly horizontal asymptotic behavior, numerous insignificantly small positive and negative changes over time (such as due to sampling and hydrogeologic variability) can overwhelm the relatively short, early-time string of decreasing changes, thus resulting in a switch from a decreasing trend to a no-trend status. This is particularly true when a 95% confidence interval is applied.

[86] It is noted that the individual interval discussions provided in Q3 2010 generally also describe the Q4 2010 behavior

[87] The individual sampling point Tritium concentrations were multiplied by the groundwater volumes in representative zones (discretized over area and depth), as computed using soil and bedrock effective porosities developed from the pumping and tracer tests (see the Hydrogeologic Site Investigation Report for further information).

[88] Hydrogeologic Site Investigation Report, January 7, 2008, prepared by GZA GeoEnvironmental, Inc, on behalf of Enercon Services, Inc., for Entergy Nuclear Northeast, Indian Point Energy Center, 450 Broadway, Buchanan, NY 10511.

[89] Approximately 70% of the sampling intervals used in the total Unit 2 Tritium activity calculations recorded an increase in Tritium activity from Q1 2010 to Q2 2010. As such, the total Tritium activity increased from 0.017 Ci to 0.021 Ci during this quarter. Similarly, an increase in Unit 2 Tritium I.L. exceedances was observed in Q2 2010. It should be noted that an increase in Tritium activity for sampling locations completed in soil (backfill) have greater impacts on the total Tritium mass calculations due to difference in overburden porosity vs. bedrock porosity.

2010) quarterly monitoring round, given the transient nature of the spill. Based on the Q4 2010 data, the total Tritium activity in the plume has decreased approximately 45 percent since Q2 2007, and has decreased by approximately 90 percent when compared to the bounding Tritium concentrations. It is noted that the time/activity data appear to be approaching a non-zero horizontal asymptote[90]. While the general "first order" plume decay is what would be expected for a plume undergoing Monitored Natural Attenuation after source termination, a non-zero asymptote suggests a continued input of Tritium into the groundwater flow regime. The data currently available lead us to believe this continuing Tritium input is likely associated with the Retention Mechanism(s), the localized transient releases detected to data and/or potentially a small unidentified Unit 2 SFP leak, as described in this and earlier reports.

Conclusion- Unit 2 Tritium Plume MNA

Based on the data and analyses provided above, our conclusion is that the Tritium plume associated with the historic Unit 2 SFP leaks is undergoing overall, long-term reductions in activity which are consistent with Monitored Natural Attenuation (MNA), the remedial technology selected for the IPEC Site. Given this conclusion and the recognition that Entergy has terminated all identified leaks in the Unit 2 SFP, this Unit 2 Tritium plume satisfies the requirements for Monitored Natural Attenuation[91]. Further justification for this conclusion can be found in Section 3.6 of the Q1 2009 Quarterly Monitoring Report as well as the Hydrogeologic Site Investigation Report.

Finally, it is important to recognize that even with the somewhat increased Tritium activities recently observed due to the RWST/R.O. skid transient surface spill, the amount of Tritium being released through the groundwater pathway is still small compared to permitted levels of Tritium discharge to the river through the Discharge Canal.

3.5.2 Unit 1 Strontium Plume Attenuation

Despite the effects of partitioning, as discussed in **Section 3.5** above, the overall Strontium activity within the Unit 1 plume had generally shown some attenuation in response to the West Pool demineralization conducted by Entergy in preparation for defueling. This work began in 2006 and resulted in an approximately 98% reduction in Strontium in the West Pool (see **Figure 7A**: U1-NCD, U1-SFDS, MW-42, U1-CSS). However, the final defueling of the Unit 1 SFPs resulted in a noticeable increase in Strontium levels proximate to the SFPs (U1-NCD, U1-SFDS, MW-42, and U1-CSS); all of which have shown large sustained decreases since mid 2009 to pre-defueling levels or even lower than pre-defueling levels. Farther downgradient (MW-53, MW-55, MW-54, MW-57, MW-50, and MW-37), increases in the Strontium plume activities were also measured, but generally after a time lag as compared to wells more proximate to the SFPs. The majority of these more downgradient monitoring locations have most recently shown decreases to pre-defueling levels. The farthest downgradient, river boundary wells (MW-67 and MW-62) have possibly shown Strontium activity increases in the past few quarterly sampling events; however, the Strontium activity in MW-67-39 has noticeably decreased over the past four quarterly monitoring rounds and is currently lower than the pre-

[90] One physical cause for a horizontal asymptote would include a persistent, unidentified leak still remaining in the Unit 2 SFP. With Tritium at approximately 30,000,000 pCi/L in the SFP, a leak directly from the pool of only approximately 10 L/day would be sufficient to provide the required Tritium input to the groundwater. To date, the available data do not appear to support the existence of such a leak. The rationale underlying this continued conclusion is based, in part, on the impact of a number of transient spills, as well as the Retention Mechanisms discussed more fully in Section 3.6 of the Q1 2009 Quarterly Monitoring Report. However, this conclusion is continually reassessed on a quarterly basis as new data becomes available. In particular, the Q3 2010 quarter's LCD data as well as that for MH-5 VCFD resulted in the initiation of additional investigations.

[91] It is noted that the previously clear attenuation of the Unit 2 Tritium plume has been confounded by a number of localized, transient surface spills. Entergy is currently in the process of reviewing and addressing work practices which may have contributed to the occurrence of these spills.

defueling levels observed at this interval. This overall increase in Strontium activity, followed by a longer term decrease, was expected given the requirement to temporarily raise the pool levels for fuel rod removal, thus increasing the leakage rate from the SFPs prior to fully draining the pool[92].

The data for Q4 2010 indicate that the overall Strontium levels continued to exhibit a general decrease and have now generally reached, or are even lower than, pre-defueling levels in the immediate vicinity of the pool (U1-NCD, MW-42, MW-56, U1-SFDS, U1-CSS and MW-53). These monitoring locations would be expected to be the first to reflect the complete decommissioning of the SFPs given their location/function. Somewhat farther downgradient, the Q4 2010 data are consistent with the "tail" portion of the perturbation as the previous increase in U1-SFPs leakage works its way towards the river. This behavior is most evident at monitoring locations MW-37, MW-50[93], and MW-57[94] where, for the most part, the maximum Strontium levels were recorded in 2009 and have shown an overall decrease over the past few quarters, approaching pre-defueling activities. MW-54, however, appeared to have already exhibited a Strontium peak in Q4 2008, and then decreased back to previous levels, even though this monitoring installation is relatively far downgradient. Similarly, the maximum post-defueling Strontium activity within all three sampling intervals at MW-55 was recorded in Q2 2009 and Q3 2009; the Strontium activity noticeably decreased following these peaks to levels that are currently lower than pre-defueling activities at this monitoring location. This behavior serves to again emphasize that the IPEC Site is located in a bedrock fracture controlled hydrologic regime[95]. As such, this type of localized "distance-based inconsistency" is to be expected and likely indicates that these wells are closer to (or within) the more pervious preferential flow pathway that is hypothesized to be responsible for the convergence and narrowing of the Tritium and Strontium plumes as they move toward the river from sources centered at widely spaced locations upgradient[96].

Farther downgradient, in the vicinity of the river, increases in Strontium activity in MW-62 may be reflective of the Unit 1 SFPs defueling operations. The MW-62-138 depth interval (along with, but to a lesser extent the shallower intervals in overburden) appears to show two distinct Strontium peaks in Q1 2009 and Q4 2009[97]. Furthermore, a third, smaller magnitude, increase in Strontium activity was observed during the previous (Q3 2010) quarterly monitoring round; however, the activity decreased to below the detection limit during the current, Q4 2010, monitoring round. Additionally, it is noted that the Strontium levels in this monitoring installation

[92] As of late 2008, all the fuel rods have been removed from the Unit 1 SFPs and the pool water has been drained. As such, the Unit 1 SFPs is no longer an active source of radionuclides to the subsurface.

[93] As noted in **Section 3.4.2** above, the Q3 2010 Strontium result in MW-50-42 exceeded the I.L. at this sampling interval. Conversely, a decrease in Strontium activity was observed in MW-50-66 during Q3 2010. Furthermore, decreases in the Strontium activity in both MW-50-42 and MW-50-66 were observed during the current, Q4 2010, monitoring round, consistent with the "tail" portion of the perturbation.

[94] Based on Q2 2010 data; both sampling intervals in this monitoring location have approximately reached pre-defueling Strontium levels. This monitoring location is sampled annually, thus no samples were collected during Q3 2010 and Q4 2010.

[95] While groundwater flow through the fractured bedrock at the IPEC Site is highly preferential at small areal scales, it is characterized by sufficiently interconnected small bedrock fractures to allow the hydrogeologic system to function and be modeled as a non-homogeneous, anisotropic, porous media at Site-wide scales.

[96] By way of contrast, in a homogeneous porous media uniform flowfield, the centerlines of plumes that start at widely spaced locations (spaced perpendicular to the groundwater flow path) will typically remain widely spaced (although the edges of the plumes will likely move closer as the plumes get wider through dispersion). In the case of fracture flow at IPEC however, not only do the Strontium and Tritium plume centerlines converge, but the plumes also get narrower as they move downgradient. In addition, MW-50 displays high relative Strontium concentrations and fault gouge was encountered during the drilling of this well. These behaviors/data are typical of a more fractured zone preferentially controlling groundwater flow and thus the migration of the contaminants therein (see the Site Hydrologic Investigation Report for further CSM-focused discussion of this issue).

[97] The increase in Q1 2009 in MW-62-138 was followed by a steady decrease over the next two quarterly monitoring events, and the peak in Q4 2009 was followed by a greater magnitude decrease in Q1 2010; the Q2 2010 Strontium activity slightly increased compared to Q1 2010.

are all relatively low (below 3 pCi/l), and this location does not appear to be proximate to (or within) the preferential flow path cited above for the Strontium plume. Therefore, the peaks in Strontium observed may not be associated with the Unit 1 defueling, and may be due to nothing more than hydrogeological variability. Another riverfront monitoring installation downgradient of the Unit 1 Strontium plume, MW-67, has also possibly exhibited impacts from the Unit 1 SFPs defueling. The Strontium data in the shallowest depth interval, MW-67-39, demonstrated a moderate increase in Strontium activity in Q4 2009, dissimilar to the previous overall decreasing trend that was seen at this sampling interval from Q4 2007 (pre-defueling) through Q3 2009. The Q4 2009 perturbation has been followed by slight, but distinct, Strontium decreases from Q1 2010 through Q4 2010 (trends consistent with "tailing off" portion of an adsorbing radionuclide), and the current, Q4 2010, activity is approximately four times lower than the pre-defueling activity within this interval. The monitoring interval directly below MW-67-39 (MW-67-105) had also shown increases in Strontium activity during the Q2 2010 and Q3 2010 quarterly monitoring events, after previously exhibiting generally stable Strontium levels since the initiation of the LTMP. Additionally, the Q3 2010 result exceeded the Strontium I.L. at MW-67-105, as discussed in **Section 3.4.2** above. Because the Strontium source was terminated, the Strontium activity at this interval was expected to decrease once the perturbation passed through the system. Accordingly, the Strontium activity rapidly decreased below the detection limit at MW-67-105 during the current, Q4 2010, quarterly monitoring round.

From an overall, long-term perspective, Strontium levels downgradient of the Unit 1 SFPs are generally behaving as expected. The monitoring installations closest to the SFPs (e.g., U1-NCD, MW-42, U1-CSS and U1-SFDS) exhibited strong peaks in Strontium activity in response to defueling, and then have decreased to, and even below, pre-defueling activities. Monitoring installations farther downgradient are generally showing decreases in Strontium activity over the past four quarterly sampling rounds and are generally approaching pre-defueling levels (e.g., MW-37, MW-55, and MW-57). As expected, the Strontium activities in a portion of these sampling intervals have already decreased to pre-defueling levels. Monitoring installations closer to the river may still show Strontium increases (similar to the recent increases at MW-67-39 and MW-67-105) as the additional leakage experienced during defueling flushes through the groundwater flow system. It is expected that completion of this flushing mechanism will be protracted given the aforementioned impact of partitioning on Strontium levels in the groundwater. However, over time it is expected that downgradient Strontium plume levels will also continue their overall downward trend once this perturbation has fully passed through the system; decreasing trends are expected and predicted given that Entergy has terminated all leaks in the Unit 1 SFPs through decommissioning and the Unit 1 Strontium plume continues to decrease in accord with Monitored Natural Attenuation.

Based on the Strontium data and plume analysis provided above, our conclusion is that the Strontium plume associated with the historic Unit 1 SFPs leak is undergoing overall, long-term reductions in activity which are consistent with Monitored Natural Attenuation (MNA), the remedial technology selected for the IPEC Site. Given this conclusion and the recognition that Entergy has terminated all identified leaks in the Unit 1 SFPs through decommissioning, the Unit 1 Strontium plume satisfies the requirements for Monitored Natural Attenuation.

4.0 CONCLUSIONS AND PLANNED FUTURE WORK

Given the data collected to date, the apparent strength of the CSM to evaluate those data, and the completion of source interdictions by Entergy, we believe all Program Objectives (see **Section 3.0)** are being met. These objectives are consistent with and fully encompass the guidance provided in the NEI Groundwater Protection Initiative (GPI).

Based on the specific results and evaluation of the Q4 2010 groundwater monitoring within the context of the Long Term Monitoring Program, IPEC plans to continue routine groundwater monitoring, related monitoring network maintenance, and reporting of the data and engineering analyses. In this context, it is noted that the analyses and conclusions presented in this report are based on the data and information available up to and including the subject quarter. Data that becomes available after the subject quarter, but before the finalization date of the report is sequentially reflected in the associated subsequent reports.

This work will be conducted in accordance with the IPEC Radiological Groundwater Monitoring Program IP-SMM-CY-110, and will incorporate the enhancements described herein.

More specifically, evaluation of data collected during Q4 2010 has shown the following:

- While I.L.s have again been met at a number of Unit 2 locations this quarter, there is no compelling evidence that any new unidentified leaks have developed in the Unit 2 SFP or other monitored Systems, Structures, or Components. In fact, after previously exceeding the Tritium I.L.s for multiple quarters in a number of upgradient Unit 2 locations, the Tritium activity in many of these locations decreased below the Tritium I.L. during the current, Q4 2010, monitoring round. Additional rationale underlying this continued conclusion is discussed more fully in Section 3.6 of the Q1 2009 Quarterly Monitoring Report. The validity of this conclusion is also not diminished by the previous Q1 2010 through Post-Q3 2010 I.L. exceedances in multiple sampling intervals proximate to the Unit 2 SFP, as well as those farther downgradient, because these Tritium increases have been generally shown to be due to a localized, transient surface spill from a rental RWST/R.O. processing skid during Q4 2009 (see **Section 3.4.5**). Given that this Tritium release was eliminated, it is expected that the Tritium activities will continue to decrease to pre-spill levels at these sampling intervals; although future releases from the storage/Retention Mechanism(s), replenished by these spills and historic SFP leaks, could create additional perturbations in Tritium levels.

  The above conclusion is continually reassessed on a quarterly basis as new data becomes available. In particular, while the LCD flow rate and the MH-5 VCFD Tritium activity have both returned to baseline levels, the previous increases exhibited in the Q3 2010 data have resulted in the initiation of additional investigations[98].
- Previously identified, more historic transient leaks included: the additional leakage from the Unit 1 SFPs during the 2008 defueling operations, the transient leakage from the distillation tank valves in Q1 2009, and the three transient surficial Tritium releases to Unit 3 Manhole A2 during the Q2 2009, Q3 2010 and Q4 2010 quarters:
  - Based on past work, additional leakage was expected during the raising of water levels in the Unit 1 SFPs for final fuel removal to ISFSI storage. Unit 1 SFPs leakage was terminated with the drainage and sealing of the pools. This previous, transient leakage was initially verified as pronounced increases in Strontium and Cesium in

[98] While all LCD and MH-5 VCFD water is contained and is release through monitored pathways, the increases observed in MW-31, MW-32 and MH-5 VCFD appear to be potentially correlated, on a temporal basis, with the increased LCD flow rate[98]. While the data trends appear to correlate on a temporal basis, it is noted that simple correlation does not demonstrate causation.

the monitoring locations closest to Unit 1. These near-pool locations have since decreased to pre-defueling levels, but additional Strontium increases have subsequently been observed farther downgradient as this transient input migrates through the system. The transient Strontium behavior at individual U1 monitoring locations is provided in Figure 7A, as we continue to monitor the Unit 1 Strontium Plume.

- The Q1 2009 leakage from the distillation tank valves was independently[99] identified based on an increase in Tritium levels in monitoring installation MW-42 proximate to the tanks, and subsequent increases in downgradient wells (MW-53-82, U1-CSS, and MW-50-42). These valves were immediately repaired and the leakage was terminated. Based on the observed data trends, it appears that the Tritium input into the groundwater flow regime from the waste distillation tank valving leak has generally dissipated through the system[100]. However, additional potential impacts of this release via the Retention Mechanism(s) will be specifically evaluated during subsequent monitoring rounds.
- An elevated Tritium activity was detected in Unit 3 Manhole A2 during routine 80-10 Effluents Program sampling during Q2 2009. This manhole is located proximate to the Unit 3 FSB. Subsequent re-sampling of this manhole showed rapidly decreasing Tritium activity, indicating that this was a transient event. This elevated Tritium was also detected in a proximate groundwater monitoring installation (MW-45), likely due to exfiltration of Tritium from the manhole. This initial peak in both MW-45-42 and MH-A2 initiated a series of investigations into the correlation and underlying cause of both the IL exceedance in the monitoring well as well as the increased Tritium in the manhole. A second elevated Tritium activity was also detected in MH-A2 (as well as MH-A4) during routine 80-10 Effluents Program sampling during the previous, Q3 2010, monitoring period. Similar to the peak observed in Q2 2009, the subsequent re-sampling indicated a rapid decrease in Tritium activity within the storm drain system. However, a prolonged increase in Tritium activity was detected in MH-A2 and A4 during the current, Q4 2010, quarter. The more recent Tritium peaks in Q3 and Q4 2010 provided additional information which helped inform further investigations. Based on these investigations, focused on sampling of the FSB roof drains, and associated data collected, it has been concluded that the elevated Tritium levels detected in MH-A2 and A4 are due to condensation of SFP evaporation on the FSB roof when the vent fan is not operating. This condensate then enters the building roof drain and discharges directly into MH-A2 during rainfall events. A number of groundwater monitoring intervals, including MW-41-40, MW-46 and B-1 have also been shown to correlate with the Tritium input into MH-A2. As such, these monitoring well peaks in Tritium activity do not indicate a new leak from a SSC.

As such, these data support the validity of the current CSM for use as a basis for Long Term Monitoring Program design. It is further noted that, while a portion of the above five documented localized release events traveled directly to the saturated groundwater

[99] The valve leakage was initially identified during routine visual inspection rounds and immediately terminated. Given that the leak was within the Unit 1 FSB structure, it was documented in a Condition Report under Entergy's Corrective Action Program. This valve leak and repair subsequently came to light within the GPI program during investigations into the cause of the abrupt increase in Tritium levels in MW-42. Additional emphasis has therefore been placed on routine review of these reports as they potentially relate to GPI objectives.

[100] Additional portions of these releases likely remain above the water table in the release area as recharge to the various Retention Mechanisms. This additional unsaturated zone source recharge will likely be manifested in the future as additional non-specific peaks in radionuclide levels due to episodic releases to the groundwater flow regime from these mechanisms (e.g., from intense/prolonged precipitation events).

regime and resulted in the observed transient "peaks" in radionuclide levels, additional portions of these releases likely remain above the water table as recharge to the various Retention Mechanisms. This additional unsaturated zone source recharge will likely be manifested in the future as additional non-specific peaks in radionuclide levels due to episodic releases to the groundwater flow regime from these mechanisms (e.g., from intense/prolonged precipitation events).

- While the current Tritium I.L. levels proved helpful over the previous four quarters (Q1 through Q4 2010) in identifying a localized, transient surface spill from a rental RWST/R.O. skid, data collected during previous quarters have generally demonstrated that the I.L.s originally established are somewhat too sensitive relative to natural seasonal/precipitation-driven transient variations in radionuclide activities, as well as the variability inherent in the laboratory analyses. Relative to Strontium from the Unit 1 SFPs, the previous increases in activity in a number of monitoring points, due to the previous Unit 1 defueling operations, limit our ability to establish Strontium baseline levels for assessment of new I.L.s pursuant to the Monitored Natural Attenuation (MNA) of this plume. It is anticipated that this additional Strontium activity will take a number of quarters to completely flush through the onsite groundwater flow system and attenuate to reasonably stable levels. As such, the originally established I.L.s for both Tritium and Strontium will continue to be used until sufficient data is collected to allow re-evaluation of I.L. levels for the radionuclides of interest.
- From both qualitative and quantitative perspectives, the overall quarterly monitoring data set supports the conclusion that the overall Tritium activity in the Unit 2 plume has decreased substantially since termination of the identified Unit 2 SFP leaks. These overall reductions have become particularly evident on the more recent quarterly report **Figures 6** and **6A** where the shaded plume[101] no longer extends to the river, as it did prior to Q2 2009. It is further visually evident from **Figure 6A** that the core of the plume (with quarterly rolling average activities greater than 100,000 pCi/L and 2007 bounding core activities greater than 250,000 pCi/L) has also shown a marked decrease in activity and extent. Based on the data and analyses provided above, our conclusion is that the Tritium plume associated with the historic leaks in the Unit 2 SFP has undergone long-term, overall reductions in activity which are consistent with Monitored Natural Attenuation (MNA), the remedial technology selected for the IPEC Site[102]. Given this conclusion, and the recognition that Entergy has terminated all identified leaks in the Unit 2 SFP[103], this Unit 2 Tritium plume satisfies the requirements for Monitored Natural Attenuation.

[101] The plume shading on **Figure 6** demarks the estimated boundary that separates Tritium levels greater than 5,000 pCi/L from those below this value, and provides a reasonable demarcation level for illustrating plume geometry and temporal variation. Although this value equates to one-quarter of the drinking water standard for Tritium, GZA emphasizes that drinking water standards (USEPA MCLs) do not apply to the IPEC property given that there are no drinking water sources on or proximate to the site. Where yearly rolling average radionuclide activity data were available for multiple depths at a given location, GZA used the highest value to develop plume delineations. This is a typical approach to represent three-dimensional contaminant data sets on two-dimensional maps.

[102] It is noted that the previously clear attenuation of the Unit 2 Tritium plume has been confounded by a number of localized, transient surface spills. Entergy is currently in the process of reviewing and addressing work practices which may have contributed to the occurrence of these spills.

[103] Further justification for this conclusion can be found in Section 3.6 of the Q1 2009 Quarterly Monitoring Report as well as the Hydrogeologic Site Investigation Report. The Q1 2009 Report summarizes additional, more quantitative analyses which were completed to further investigate the integrity of the Unit 2 SFP. These analyses provide further support for the original conclusion that the Unit 2 SFP is no longer leaking. However, given the more recent behavior observed in the Unit 2 LCD and MH-5 VCFD data, additional investigations/data evaluations are underway. In this regard, it is noted that these analyses cannot definitively and completely rule out the possibility of a remaining small Unit 2 SFP leak which could then also be supplying Tritium to the groundwater flow regime in addition to the Retention Mechanism(s) and surface spill from the process skid discussed above. While it is not possible to quantify the size of the minimum detectable leak with any degree of certainty, we believe that the maximum leak

- The overall Strontium activity within the Unit 1 plume had generally been stable or decreasing in response to West Pool demineralization conducted by Entergy beginning in 2006. However, the final defueling of the Unit 1 SFPs resulted in an initial, noticeable increase, followed by a subsequent and commensurate decrease, in Strontium levels proximate to the SFPs, with later increases in the downgradient Strontium levels (see **Figure 7** and **7A**). This is as was predicted given the requirement to temporarily raise the pool levels for fuel rod removal, thus increasing leakage rate from the SFPs[104]. As anticipated, the levels proximate to the pool have decreased to pre-defueling Strontium levels (and in a number of cases to below pre-defueling levels), and levels downgradient of the pool are generally showing continued decreases as this additional Strontium-contaminated water flushes through the groundwater flow system. It is expected that this flushing mechanism will be protracted given the aforementioned impact of partitioning on Strontium levels in the groundwater. However, over time it is expected that downgradient Strontium plume levels will also achieve an overall downward trend below pre-defueling levels once this perturbation is finished passing through the system. Given this conclusion and the recognition that Entergy has terminated all identified leaks in the Unit 1 SFPs through decommissioning, the Unit 1 Strontium plume satisfies the requirements for Monitored Natural Attenuation. However, as indicated above, the establishment of updated I.L.s for the Unit 1 Strontium plume must await return to the original Strontium baseline levels in the downgradient monitoring locations, which existed prior to Unit 1 defueling.
- The amount of radionuclides being released through the groundwater pathway, even with the somewhat increased Tritium levels currently observed due to the RWST/R.O. skid transient surface spill, is still small compared to permitted levels of radionuclides discharged to the river through the Discharge Canal.

rate from the Unit 2 SFP that could potentially remain undetected by the groundwater monitoring system is less than 10 to 30 gpd (0.007 to 0.021 gallons per minute). It is also likely that if a small leak exists in the Unit 2 SFP liner, it should not get worse with time, as based on liner evaluations previously conducted by Entergy. It is further emphasized that while a leak of greater than 0.02 gallons per minute should be large enough to be readily detectable with the existing Long Term Monitoring Program, this amount of Tritium release to the river is still small compared to permitted levels of Tritium discharge to the river through the Discharge Canal.

[104] As of late 2008, all the fuel rods have been removed from the Unit 1 SFPs and the pool water has been drained. As such, the Unit 1 SFPs is no longer an active source of radionuclides to the subsurface.

TABLES

TABLE 1
GROUNDWATER SAMPLING METHODS, EQUIPMENT, FREQUENCY AND DEPTHS
INDIAN POINT ENGERGY CENTER
BUCHANAN, NY

Well ID[1]	Sampling Method	Sampling Equipment Used	Projected 2011 Sampling Frequency[2]	SAMPLING INTERVAL[3]				SAMPLING DEPTH[4]	
				Ft Below Top of Casing		Elevation in Feet msl			
				Top	Bottom	Top	Bottom	Feet Below TOC	Elevation in Feet msl
MW-30-69	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	67.3	71.3	8.4	4.4	69.3	6.4
MW-30-84	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	77.3	85.4	-1.6	-9.5	83.8	-8.1
MW-31-49	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	34.8	49.3	40.8	26.3	48.8	26.8
MW-31-63	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	55.3	63.8	20.3	11.8	63.3	12.3
MW-31-85	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	69.8	85.4	5.8	-9.6	84.8	-9.2
MW-32-59	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	28.3	61.3	48.8	15.8	58.8	18.3
MW-32-85	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	79.3	92.8	-2.2	-15.7	85.3	85.3
MW-32-131	Waterloo Low Flow	Waterloo Multilevel System	Inactive	125.8	138.3	-48.7	-61.2	130.8	-53.7
MW-32-149	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	125.8	156.8	-70.2	-79.7	149.3	-72.2
MW-32-173	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	165.8	174.3	-88.7	-97.2	172.8	-95.7
MW-32-190	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	180.3	193.9	-103.2	-116.8	190.3	-113.7
MW-33	Low Flow	Peristaltic Pump	Annually	8.0	30.0	10.6	-11.7	16	2.8
MW-34	Low Flow	Peristaltic Pump	Inactive	5.0	30.0	13.5	-11.5	16.5	2.0
MW-35	Low Flow	Peristaltic Pump	Annually	6.5	30.0	12.1	-11.4	15.0	3.6
MW-36-24	Low Flow	Peristaltic Pump	Quarterly	11.0	24.0	0.8	-12.2	17.0	-5.2
MW-36-41	Low Flow	Peristaltic Pump	Inactive	36.0	41.0	-24.2	-29.2	37.0	-25.2
MW-36-52	Low Flow	Peristaltic Pump	Quarterly	48.0	53.0	-36.2	-41.2	50.0	-38.2
MW-37-22	Low Flow	Peristaltic Pump	Quarterly	12.0	22.0	3.0	-7.0	17.0	-2.0
MW-37-32	Low Flow	Peristaltic Pump	Quarterly	28.0	32.5	-13.0	-17.5	29.0	-14.0
MW-37-40	Low Flow	Peristaltic Pump	Quarterly	38.5	40.5	-23.5	-24.5	39.0	-24.0
MW-37-57	Low Flow	Peristaltic Pump	Quarterly	52.0	57.0	-37.0	-42.0	55.0	-40.0
MW-38	Low Flow	Peristaltic Pump	Inactive	5.0	40.0	9.3	-25.7	25.4	-11.1
MW-39-67	Waterloo Low Flow	Waterloo Multilevel System	Semi-Annually	65.0	70.5	15.0	9.5	67.0	13.0
MW-39-84	Waterloo Low Flow	Waterloo Multilevel System	Semi-Annually	76.5	85.0	3.5	-5.0	83.5	-3.5
MW-39-102	Waterloo Low Flow	Waterloo Multilevel System	Semi-Annually	93.0	103.0	-13.0	-23.0	101.5	-21.5
MW-39-124	Waterloo Low Flow	Waterloo Multilevel System	Semi-Annually	115.0	126.5	-35.0	-46.5	124.0	-44.0
MW-39-183	Waterloo Low Flow	Waterloo Multilevel System	Semi-Annually	169.5	186.0	-89.5	-106.0	182.5	-102.5
MW-39-195	Waterloo Low Flow	Waterloo Multilevel System	Semi-Annually	193.0	198.6	-113.0	-118.4	195.0	-115.0
MW-40-27	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	18.2	35.2	55.0	38.0	26.7	46.5
MW-40-46	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	44.2	53.7	29.0	19.5	46.2	27.0
MW-40-81	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	64.7	84.2	8.5	-11.0	80.7	-7.5
MW-40-100	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	93.2	106.7	-20.0	-33.5	100.2	-27.0
MW-40-127	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	125.2	136.7	-52.0	-63.5	127.2	-54.0
MW-40-162	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	158.7	190.3	-85.5	-116.9	161.7	-88.5
MW-41-40	Low Flow	Peristaltic Pump	Quarterly	22.0	42.0	32.9	12.9	36.0	18.9
MW-41-63	Modified Well Vol. Purge	Waterra Pump	Quarterly	59.0	64.0	-4.1	-9.1	61.0	-6.1
MW-42-49	Modified Well Vol. Purge	Submersible Pump	Quarterly	31.0	51.0	38.7	18.7	41.0	28.7
MW-42-78	Modified Well Vol. Purge	Waterra Pump	Quarterly	69.0	79.0	0.7	-9.3	74.0	-4.3
MW-43-28	Low Flow	Submersible Pump	Quarterly	8.0	28.0	40.8	20.7	23.0	25.8
MW-43-62	Low Flow	Submersible Pump	Quarterly	42.0	62.0	6.8	-13.2	54.0	-5.2
MW-44-66	Modified Well Vol. Purge	Submersible Pump	Quarterly	52.0	67.0	41.5	26.5	63.0	30.5
MW-44-102	Modified Well Vol. Purge	Waterra Pump	Quarterly	79.0	104.0	14.5	-10.5	80.0	13.5
MW-45-42	Modified Well Vol. Purge	Peristaltic Pump	Quarterly	27.5	42.5	26.2	11.2	37.0	16.6
MW-45-61	Modified Well Vol. Purge	Peristaltic Pump	Quarterly	51.5	61.5	2.2	-7.8	58.0	-4.4
MW-46	Modified Well Vol. Purge	Submersible Pump	Quarterly	6.0	30.0	12.1	-11.9	10.5	7.6
MW-47-56	Low Flow	Submersible Pump	Inactive	36.0	56.0	34.3	14.3	52.0	18.3
MW-47-80	Modified Well Vol. Purge	Waterra Pump	Inactive	70.0	80.0	0.3	-9.7	72.0	-1.7

See Page 3 for Notes

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BUCHANAN, NY

Well ID[1]	Sampling Method	Sampling Equipment Used	Projected 2011 Sampling Frequency[2]	SAMPLING INTERVAL[3]				SAMPLING DEPTH[4]	
				Ft Below Top of Casing		Elevation in Feet msl			
				Top	Bottom	Top	Bottom	Feet Below TOC	Elevation in Feet msl
MW-48-23	Low Flow	Peristaltic Pump	Inactive	8.0	23.0	7.4	-7.6	15.8	-0.4
MW-48-37	Low Flow	Peristaltic Pump	Inactive	33.0	38.0	-17.6	22.6	35.8	-20.4
MW-49-26	Low Flow	Peristaltic Pump	Quarterly	15.0	25.0	-0.3	-10.4	20.0	-5.3
MW-49-42	Low Flow	Peristaltic Pump	Quarterly	32.0	42.0	-17.4	-27.4	37.0	-22.3
MW-49-65	Low Flow	Peristaltic Pump	Quarterly	60.0	65.0	-45.4	-50.4	61.0	-46.4
MW-50-42	Low Flow	Peristaltic Pump	Quarterly	22.0	42.0	-7.1	-27.1	27.0	-12.1
MW-50-66	Low Flow	Peristaltic Pump	Quarterly	62.0	67.0	-47.1	-52.1	60.0	-45.1
MW-51-40	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	29.7	44.2	38.0	23.5	39.7	28.0
MW-51-79	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	63.2	81.2	4.5	-13.5	78.7	-11.0
MW-51-104	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	101.2	111.2	-33.5	-43.5	103.7	-36.0
MW-51-135	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	130.2	143.7	-62.5	-76.0	135.2	-67.5
MW-51-163	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	154.7	166.2	-87.0	-98.5	162.7	-95.0
MW-51-189	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	184.2	197.8	-116.5	-129.9	189.2	-121.5
MW-52-11	Modified Well Vol. Purge	Peristaltic Pump	Annually	2.0	12.0	14.8	4.8	10.0	6.8
MW-52-18	Waterloo Low Flow	Waterloo Multilevel System	Annually	10.0	30.0	4.9	-15.1	17.5	-2.6
MW-52-48	Waterloo Low Flow	Waterloo Multilevel System	Annually	48.0	56.0	-33.1	-41.1	48.0	-33.1
MW-52-64	Waterloo Low Flow	Waterloo Multilevel System	Annually	59.0	71.5	-44.1	-56.6	64.0	-49.1
MW-52-122	Waterloo Low Flow	Waterloo Multilevel System	Annually	110.5	123.5	-95.6	-108.6	122.0	-107.1
MW-52-162	Waterloo Low Flow	Waterloo Multilevel System	Annually	154.5	164.0	-139.6	-149.1	161.5	-146.6
MW-52-181	Waterloo Low Flow	Waterloo Multilevel System	Annually	171.0	198.1	-156.1	-183.0	181.0	-166.1
MW-53-82	Low Flow	Submersible Pump	Quarterly	62.0	82.0	8.3	-11.7	75.0	-4.7
MW-53-120	Modified Well Vol. Purge	Waterra Pump	Quarterly	100.0	120.0	-29.7	-49.7	105.0	-34.7
MW-54-37	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	29.0	42.0	-15.9	-28.9	36.5	-23.4
MW-54-58	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	51.5	64.0	-38.4	-50.9	57.5	-44.4
MW-54-123	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	116.0	126.0	-102.9	-112.9	123.0	-109.9
MW-54-144	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	135.0	155.5	-121.9	-142.4	144.0	-130.9
MW-54-173	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	170.5	182.0	-157.4	-168.9	172.5	-159.4
MW-54-190	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	185.0	203.6	-171.9	-190.3	190.0	-176.9
MW-55-24	Low Flow	Peristaltic Pump	Quarterly	14.0	24.0	4.3	-5.8	16.0	2.3
MW-55-35	Low Flow	Peristaltic Pump	Quarterly	30.0	35.0	-11.8	-16.8	32.0	-13.8
MW-55-54	Low Flow	Peristaltic Pump	Quarterly	44.0	54.0	-25.8	-35.8	47.0	-28.8
MW-56-53	Modified Well Vol. Purge	Submersible Pump	Semi-Annually	49.2	54.2	21.0	16.0	52.0	18.3
MW-56-83	Modified Well Vol. Purge	Waterra Pump	Semi-Annually	69.9	84.9	0.4	-14.6	74.0	-3.7
MW-57-11	Modified Well Vol. Purge	Peristaltic Pump	Annually	6.0	11.0	9.0	4.0	10.0	5.0
MW-57-20	Modified Well Vol. Purge	Peristaltic Pump	Annually	15.5	20.5	-0.5	-5.5	19.0	-4.0
MW-57-45	Modified Well Vol. Purge	Peristaltic Pump	Annually	30.5	45.5	-15.5	-30.5	40.0	-25.0
MW-58-26	Low Flow	Peristaltic Pump	Semi-Annually	16.0	26.0	-1.4	-11.4	20.0	-5.4
MW-58-65	Low Flow	Peristaltic Pump	Semi-Annually	50.0	65.0	-35.4	-50.4	54.0	-39.4
MW-59-32	Low Flow	Peristaltic Pump	Inactive	21.0	31.0	-6.5	-16.5	27.0	-12.5
MW-59-45	Low Flow	Peristaltic Pump	Inactive	35.0	45.0	-20.5	-30.5	42.0	-27.5
MW-59-68	Low Flow	Peristaltic Pump	Inactive	53.0	68.0	-38.5	-53.5	58.0	-43.5
MW-60-35	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	24.9	39.4	-12.4	-26.9	34.9	-22.4
MW-60-53	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	45.4	59.4	-32.9	-46.9	53.4	-40.9
MW-60-72	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	66.4	78.9	-53.9	-66.4	72.4	-59.9
MW-60-135	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	124.9	141.4	-112.4	-128.9	134.9	-122.4
MW-60-154	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	147.4	164.9	-134.9	-152.4	154.4	-141.9
MW-60-176	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	170.9	200.4	-158.4	-187.8	175.9	-163.4

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				Ft Below Top of Casing		Elevation in Feet msl			
				Top	Bottom	Top	Bottom	Feet Below TOC	Elevation in Feet msl
MW-62-18	Low Flow	Peristaltic Pump	Quarterly	4.7	14.7	10.0	0.0	13.5	1.2
MW-62-37	Low Flow	Peristaltic Pump	Quarterly	33.3	38.3	-18.6	-23.6	34.5	-19.8
MW-62-53	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	49.6	54.1	-36.8	-41.3	53.1	-40.3
MW-62-71	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	61.1	82.6	-48.3	-69.8	71.1	-58.3
MW-62-92	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	88.6	99.1	-75.8	-86.3	91.6	-78.8
MW-62-138	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	126.1	143.6	-113.3	-130.8	138.1	-125.3
MW-62-182	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	177.6	198.7	-164.8	-185.7	182.1	-169.3
MW-63-18	Low Flow	Peristaltic Pump	Quarterly	8.0	18.0	-3.8	-13.8	14.9	0.7
MW-63-34	Low Flow	Peristaltic Pump	Quarterly	30.0	35.0	-15.8	-20.8	31.5	-17.3
MW-63-50	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	41.5	58.0	-29.2	-45.7	49.5	-37.2
MW-63-93	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	81.5	100.5	-69.2	-88.2	93.0	-80.7
MW-63-112	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	106.5	112.0	-94.2	-99.7	111.5	-99.2
MW-63-121	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	118.0	127.5	-105.7	-115.2	121.0	-108.7
MW-63-163	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	150.5	165.0	-138.2	-152.7	162.5	-150.2
MW-63-174	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	168.0	191.1	-155.7	-178.6	174.0	-161.7
MW-66-21	Modified Well Vol. Purge	Peristaltic Pump	Quarterly	7.0	27.0	6.0	-7.0	14.1	0
MW-66-36	Modified Well Vol. Purge	Peristaltic Pump	Quarterly	31.0	36.0	-17.0	-22.0	33.6	-19.5
MW-67-39	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	28.8	54.3	-15.8	-41.3	38.3	-25.8
MW-67-105	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	90.3	110.8	-77.3	-97.8	104.8	-92.3
MW-67-173	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	164.8	188.3	-151.8	-175.3	172.3	-159.8
MW-67-219	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	209.3	229.8	-196.3	-216.8	218.8	-206.3
MW-67-276	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	250.8	281.3	-237.8	-268.3	275.3	-262.8
MW-67-323	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	317.8	328.3	-304.8	-315.3	322.3	-309.8
MW-67-340	Waterloo Low Flow	Waterloo Multilevel System	Quarterly	335.3	347.9	-322.3	-334.9	339.8	-327.3
MW-107	Low Flow	Submersible Pump	Annually	105.1	126.1	34.9	13.9	32.7	110.1
MW-111	Low Flow	Peristaltic Pump	Semi-Annually	11.6	17.4	7.0	1.5	16.5	2.4
U3-4D	Modified Well Vol. Purge	Peristaltic Pump	Quarterly	25.0	27.6	-10.2	-12.8	25.6	-10.8
U3-T1	Low Flow	Peristaltic Pump	Quarterly	0.2	1.2	3.1	2.1	5.7	2.8
U3-T2	Low Flow	Peristaltic Pump	Quarterly	0.6	1.6	2.7	1.7	5.7	2.6
U1-CSS	Low Flow	Peristaltic Pump	Semi-Annually	NA	10.2	NA	4.9	14.0	6.1
LAF-002	Low Flow	NA	Semi-Annually	NA	NA	NA	NA	NA	-22.3
U1-NCD	Grab	NA	Quarterly	NA	NA	NA	NA	NA	NA
U1-SFDS	Grab	NA	Quarterly	NA	NA	NA	NA	NA	NA
MH-5 YCFD[6]	Grab	NA	Quarterly	NA	NA	NA	NA	NA	NA
B-1[6]	Grab	NA	Quarterly	NA	NA	NA	NA	NA	NA
B-6[6]	Grab	NA	Quarterly	NA	NA	NA	NA	NA	NA

Notes:

1. For nested multi-level monitoring wells, suffix of well ID indicates depth (rounded to nearest foot) from reference point on casing to bottom of well screen. For Waterloo multi-level systems, suffix indicates depth (rounded to nearest foot) from reference point on casing to top of sampling port. Well IDs without a suffix are open bedrock wellbores.
2. Projected sampling frequencies presented for 2011 are subject to change.
3. For nested multi-level monitoring wells, interval includes well screen and sand pack. For Waterloo multi-level systems, interval includes open wellbore between bottom of 1st packer above and top of 1st packer below sampling port. For open bedrock wellbores, interval extends from bottom of casing to bottom of hole.
4. Sampling depths within sampling intervals (i.e. location of pump intake) have been located adjacent to a transmissive zone where possible.
5. Dot pattern denotes sampling interval is positioned within overburden. Open box indicates sampling interval is in bedrock.
6. These locations are storm drains.

TABLE 2
HISTORIC QUARTERLY LOW TIDE GROUNDWATER ELEVATIONS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID	LOW RIVER TIDE GROUNDWATER ELEVATIONS (Feet msl)														
	Quarter 2[1], 2007	Quarter 3[2], 2007	Quarter 4[3], 2007	Quarter 1[4], 2008	Quarter 2[5], 2008	Quarter 3[6], 2008	Quarter 4[7], 2008	Quarter 1[8], 2009	Quarter 2[9], 2009	Quarter 3[10,11], 2009	Quarter 4[12], 2009	Quarter 1[13], 2010	Quarter 2[14], 2010	Quarter 3[15], 2010	Quarter 4[16], 2010
HR-1	NA	-0.86	-1.57	-2.15	-1.13	-1.05	-1.69	-3.28	-1.52	-0.27	-3.59	-0.36	-0.56	-0.71	NA
I-2	50.23	48.62	51.87	53.73	52.11	52.90	50.75	NA	NA	NA	51.69	52.46	53.33	50.49	NA
MW-30-69	11.83	11.53	12.00	NA	12.28	11.77	11.71	12.33	11.84	13.76	NA	NA	NA	NA	11.56
MW-30-84	12.77	12.47	12.83	NA	13.06	12.68	12.36	13.13	12.82	12.48	12.27	13.26	12.76	11.31	12.32
MW-31-49	44.09	NA	45.40	47.50	46.14	45.39	44.13	46.44	45.40	-	-	-	-	-	-
MW-31-63	41.56	NA	42.71	45.52	43.96	42.17	41.21	44.12	43.20	-	-	-	-	-	-
MW-31-85	39.59	NA	40.81	43.19	41.89	40.58	39.64	42.10	40.64	-	-	-	-	-	-
MW-32-48	NA	42.12	46.73	48.81	47.77	46.98	45.79	48.08	47.31	-	-	-	-	-	-
MW-32-59	NA	41.44	45.99	47.99	46.75	45.72	44.48	46.83	45.62	-	-	-	-	-	-
MW-32-85 (MW-32-92)[7]	10.27	12.35	12.78	13.30	13.17	12.30	12.16	12.60	11.61	-	-	-	-	-	-
MW-32-131 (MW-32-140)[17]	13.11	11.96	13.21	25.01	15.67	11.34	11.53	11.86	11.06	-	-	-	-	-	-
MW-32-149 (MW-32-165)[17]	8.18	9.87	10.06	10.20	10.01	9.71	9.77	10.00	9.18	-	-	-	-	-	-
MW-32-173	NA	9.73	9.86	9.92	9.70	9.45	9.45	9.68	8.81	-	-	-	-	-	-
MW-32-190 (MW-32-196)[17]	6.74	8.05	7.88	7.88	7.52	7.16	7.05	7.24	6.26	-	-	-	-	-	-
MW-33	10.08	9.80	10.38	11.49	11.66	10.55	10.60	11.23	10.52	-	-	-	-	-	-
MW-34	9.87	9.82	10.44	11.63	12.03	10.54	10.54	11.25	6.71	-	-	-	-	-	-
MW-35	10.03	9.67	10.37	11.65	12.06	10.68	10.68	11.36	NA	-	-	-	-	-	-
MW-36-24	8.89	7.31	7.67	6.85	6.86	7.58	9.05	NA	7.25	-	-	-	-	-	-
MW-36-41	8.22	NA	NA	NA	NA	NA	NA	NA	NA	-	-	-	-	-	-
MW-36-52	7.43	6.43	6.45	6.42	6.29	6.99	7.45	8.12	6.62	-	-	-	-	-	-
MW-37-22	5.51	5.15	4.83	4.66	4.18	5.36	5.55	4.45	5.24	-	-	-	-	-	-
MW-37-32	5.51	5.07	4.82	4.63	4.05	5.36	5.64	4.55	5.32	-	-	-	-	-	-
MW-37-40	5.40	6.83	6.19	6.17	5.95	6.18	6.04	5.46	6.19	-	-	-	-	-	-
MW-37-57	7.07	6.23	6.39	6.28	6.07	6.64	7.20	6.50	6.56	-	-	-	-	-	-
MW-38	3.01	2.19	1.46	2.22	1.53	2.12	1.22	NA	2.24	-	-	-	-	-	-
MW-39-67	NA	NA	26.84	32.20	31.69	25.96	25.21	28.74	NA	-	-	-	-	-	-
MW-39-84	NA	NA	26.64	31.94	31.48	25.78	25.12	28.62	NA	-	-	-	-	-	-
MW-39-100	NA	NA	26.38	30.99	31.34	25.52	24.79	28.32	NA	-	-	-	-	-	-
MW-39-102	NA	NA	26.31	31.56	NA	NA	NA	NA	NA	-	-	-	-	-	-
MW-39-124	NA	NA	26.05	28.37	30.67	25.07	24.43	27.74	NA	-	-	-	-	-	-
MW-39-183	NA	NA	25.28	29.74	29.83	22.33	23.79	26.78	NA	-	-	-	-	-	-
MW-39-195	NA	NA	24.36	28.80	28.89	23.35	22.70	25.63	NA	-	-	-	-	-	-
MW-40-27	NA	NA	55.46	60.39	59.99	54.70	54.22	59.53	57.25	58.75	55.71	59.08	59.86	52.85	NA
MW-40-46	NA	47.27	53.19	59.35	59.09	52.57	52.35	59.13	56.56	-	-	-	-	-	-
MW-40-81	NA	41.65	47.45	56.06	55.78	47.28	46.83	55.67	53.13	-	-	-	-	-	-
MW-40-100	NA	39.47	45.18	54.10	53.75	44.83	44.32	53.59	51.24	-	-	-	-	-	-
MW-40-127	NA	38.89	44.60	53.61	53.39	44.33	43.87	53.29	50.59	-	-	-	-	-	-
MW-40-162	NA	36.67	41.09	50.49	50.26	41.32	40.66	49.76	46.80	48.42	42.85	49.55	50.03	38.96	44.88
MW-41-40	29.87	NA	32.48	36.57	33.81	31.28	30.71	33.62	32.05	-	-	-	-	-	-
MW-41-63	25.94	NA	27.77	33.31	32.76	27.53	26.96	30.38	28.39	-	-	-	-	-	-
MW-42-49	NA	NA	34.55	34.96	34.81	34.52	34.43	34.78	34.47	-	-	-	-	-	-
MW-42-78	NA	NA	35.71	36.63	36.28	35.38	35.07	36.03	35.75	-	-	-	-	-	-
MW-43-28	32.75	31.08	31.98	33.47	33.95	32.51	32.15	33.43	32.54	32.66	NA	NA	34.23	37.14	31.95
MW-43-62	30.83	NA	NA	NA	32.16	30.48	31.76	34.13	30.88	NA	30.28	32.00	32.00	30.20	31.50
MW-44-67	33.36	NA	34.36	37.99	35.47	35.29	34.00	34.96	34.50	-	-	-	-	-	-
MW-44-102	23.10	NA	24.84	NA	30.88	25.86	25.16	28.09	27.41	-	-	-	-	-	-
MW-45-42	NA	24.82	28.47	34.19	37.16	28.63	25.45	32.02	29.03	-	-	-	-	-	-
MW-45-61	NA	24.33	27.57	32.91	32.46	27.16	26.68	29.99	23.25	-	-	-	-	-	-
MW-46	12.80	11.95	12.57	15.05	14.97	12.62	12.81	14.29	12.47	12.83	NA	NA	16.49	12.45	13.22
MW-47-56	21.83	20.77	23.05	27.76	31.53	22.84	22.37	26.51	23.43	-	-	-	-	-	-
MW-47-80	22.29	21.41	21.82	26.53	28.35	21.52	21.08	26.37	24.18	-	-	-	-	-	-
MW-48-23	-0.08	-0.27	-0.39	-1.14	-0.23	-0.18	-0.48	-0.91	-0.19	-	-	-	-	-	-
MW-48-37	0.64	0.26	-0.06	-0.18	0.32	0.06	-0.15	-0.50	0.04	-	-	-	-	-	-
MW-49-26	1.04	NA	-0.37	-0.62	0.51	0.37	0.49	-0.25	0.54	-	-	-	-	-	-
MW-49-42	0.31	0.90	0.40	-0.44	0.92	1.02	0.68	-0.06	0.51	-	-	-	-	-	-
MW-49-65	0.89	1.01	0.34	0.07	0.70	0.68	0.47	-0.08	0.57	-	-	-	-	-	-
MW-50-42	7.24	NA	NA	NA	5.24	6.40	7.06	5.66	6.09	-	-	-	-	-	-

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INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID	LOW RIVER TIDE GROUNDWATER ELEVATIONS (Feet msl)														
	Quarter 2[1], 2007	Quarter 3[2], 2007	Quarter 4[3], 2007	Quarter 1[4], 2008	Quarter 2[5], 2008	Quarter 3[6], 2008	Quarter 4[7], 2008	Quarter 1[8], 2009	Quarter 2[9], 2009	Quarter 3[10,11], 2009	Quarter 4[12], 2009	Quarter 1[13], 2010	Quarter 2[14], 2010	Quarter 3[15], 2010	Quarter 4[16], 2010
MW-50-66	3.71	NA	NA	1.97	2.24	2.83	2.34	1.95	2.82	-	-	-	-	-	-
MW-51-40	NA	48.69	50.07	51.95	52.35	49.44	49.24	49.32	45.15	46.45	42.45	43.37	41.72	41.89	41.24
MW-51-79	NA	39.92	41.07	42.91	44.17	40.71	40.36	42.75	42.15	-	-	-	-	-	-
MW-51-102	NA	35.98	38.07	38.46	39.04	36.56	36.17	38.18	37.78	-	-	-	-	-	-
MW-51-104	NA	NA	37.93	38.41	39.02	36.49	36.03	37.99	37.49	-	-	-	-	-	-
MW-51-135	NA	37.42	39.47	39.99	40.71	38.10	37.68	39.75	39.34	-	-	-	-	-	-
MW-51-163	NA	33.79	34.83	36.15	36.77	34.30	33.90	35.74	35.44	-	-	-	-	-	-
MW-51-189	NA	29.33	30.16	31.34	31.79	29.65	29.36	30.81	30.48	32.18	29.93	31.85	31.42	29.07	29.60
MW-52-11	6.04	5.61	8.12	8.47	8.85	8.65	8.44	8.19	9.20	-	-	-	-	-	-
MW-52-18	6.64	NA	8.63	6.04	6.07	5.89	6.02	5.78	5.87	-	-	-	-	-	-
MW-52-48	7.08	NA	6.55	6.53	5.95	6.20	6.14	6.05	5.75	-	-	-	-	-	-
MW-52-64	5.96	NA	5.90	5.25	5.03	5.21	5.16	5.20	4.89	-	-	-	-	-	-
MW-52-118	5.34	NA	4.41	4.44	4.32	4.36	4.68	4.23	4.23	-	-	-	-	-	-
MW-52-122	5.25	NA	4.26	4.32	4.18	4.21	4.55	4.11	4.20	-	-	-	-	-	-
MW-52-162	0.67	NA	-0.80	-1.31	-0.80	-0.98	-1.30	-2.07	-1.18	-	-	-	-	-	-
MW-52-181	0.41	NA	-1.08	-1.56	-1.00	-1.30	-1.64	-2.38	-1.51	-	-	-	-	-	-
MW-53-82	NA	9.59	10.03	11.99	12.60	10.35	NA	11.11	NA	11.11	9.87	11.15	11.67	9.98	11.27
MW-53-120	9.91	9.18	9.59	10.87	11.49	9.76	NA	10.55	9.78	10.43	9.43	10.53	11.02	9.60	10.33
MW-54-35	NA	NA	6.40	6.27	6.36	6.16	6.41	5.75	5.87	-	-	-	-	-	-
MW-54-37	7.52	NA	6.58	6.45	6.53	6.30	6.58	5.90	6.04	-	-	-	-	-	-
MW-54-58	6.86	NA	5.82	5.60	5.55	5.53	5.76	5.49	5.17	-	-	-	-	-	-
MW-54-123	5.69	NA	4.16	3.65	3.52	4.01	4.06	2.99	3.56	-	-	-	-	-	-
MW-54-144	8.85	NA	7.13	6.60	6.48	6.92	6.97	5.89	6.53	-	-	-	-	-	-
MW-54-173	5.17	NA	3.52	2.99	2.85	3.27	3.29	2.19	2.72	-	-	-	-	-	-
MW-54-190	5.08	NA	3.46	2.91	2.76	3.16	3.13	2.00	2.49	-	-	-	-	-	-
MW-55-24	8.56	7.82	7.97	8.17	8.16	8.18	9.02	8.35	8.06	8.39	7.80	8.58	8.56	8.02	8.27
MW-55-35	8.10	7.29	7.52	7.60	7.59	7.69	8.30	7.63	9.49	-	-	-	-	-	-
MW-55-54	8.47	7.65	7.75	8.08	8.32	8.22	8.82	NA	7.89	8.14	7.66	8.39	8.34	7.97	8.19
MW-56-53	21.04	20.16	NA	NA	29.93	NA	21.90	27.33	22.06	-	-	-	-	-	-
MW-56-83	21.10	20.10	22.18	26.41	29.16	NA	21.51	25.13	22.60	-	-	-	-	-	-
MW-57-11	9.57	8.83	9.36	10.99	NA	10.03	10.27	11.11	10.09	-	-	-	-	-	-
MW-57-20	9.38	NA	NA	NA	12.07	10.02	9.92	10.63	9.84	-	-	-	-	-	-
MW-57-45	9.08	NA	NA	NA	10.59	NA	NA	10.71	NA	-	-	-	-	-	-
MW-58-26	8.03	6.49	6.58	8.32	NA	7.29	7.19	7.56	7.40	-	-	-	-	-	-
MW-58-65	6.03	6.83	6.22	NA	7.36	7.13	6.46	6.68	6.70	-	-	-	-	-	-
MW-59-32	1.06	NA	0.67	0.42	0.77	0.81	0.47	0.31	1.37	-	-	-	-	-	-
MW-59-45	1.06	1.27	0.42	NA	9.23	NA	2.52	0.44	NA	-	-	-	-	-	-
MW-59-68	2.91	2.51	1.97	0.90	-0.11	NA	-1.79	-5.66	7.93	-	-	-	-	-	-
MW-60-35	2.19	1.28	1.32	1.58	1.63	0.82	2.04	1.99	3.07	-	-	-	-	-	-
MW-60-53	-0.63	-1.24	-1.67	-2.04	-1.37	-1.76	-2.03	-2.70	NA	-	-	-	-	-	-
MW-60-55	NA	-0.28	-0.73	-1.10	-0.47	-0.90	-1.21	-1.91	NA	-	-	-	-	-	-
MW-60-72	0.74	-0.09	-0.45	-0.68	-0.14	-0.64	NA	-1.43	0.28	-	-	-	-	-	-
MW-60-135	0.94	0.11	-0.44	-0.90	-0.27	-0.71	-1.02	-1.72	0.11	-	-	-	-	-	-
MW-60-154	0.08	-0.96	-1.61	-2.07	-1.49	-1.91	-2.25	-2.99	NA	-	-	-	-	-	-
MW-60-176	-0.48	-1.38	-2.03	-2.47	-1.82	-2.16	-2.59	-3.41	NA	-	-	-	-	-	-
MW-62-18	0.25	0.25	-0.37	-0.79	0.13	0.06	-0.12	-0.82	NA	-	-	-	-	-	-
MW-62-37	0.59	0.61	-0.03	-0.46	0.49	0.59	-0.15	-1.13	0.11	-	-	-	-	-	-
MW-62-52	NA	0.48	-0.30	-1.13	-0.19	-0.29	-0.93	-1.64	-0.42	-	-	-	-	-	-
MW-62-53	0.95	0.54	-0.25	-1.01	-0.10	-0.16	-0.84	-2.03	-0.44	-	-	-	-	-	-
MW-62-71	0.89	0.22	-0.56	-1.26	-0.55	-0.56	-1.24	-2.15	-1.03	-	-	-	-	-	-
MW-62-92	1.07	0.58	-0.09	-0.76	-0.11	-0.10	-0.85	-1.68	-0.70	-	-	-	-	-	-
MW-62-138	1.40	0.77	0.09	-0.49	0.13	0.26	-0.37	-1.33	-0.40	-	-	-	-	-	-
MW-62-181	1.33	0.38	-0.33	-0.99	-0.32	-0.36	-0.92	NA	-0.88	-	-	-	-	-	-
MW-62-182	NA	-0.33	-1.83	-0.78	-1.29	-1.25	-1.85	-2.66	-1.82	-	-	-	-	-	-
MW-63-18	0.11	0.09	-0.10	-0.37	0.09	0.32	-0.08	-0.61	0.02	-	-	-	-	-	-
MW-63-34	0.51	0.19	-0.09	-0.40	0.13	0.05	-0.13	-0.74	0.18	-	-	-	-	-	-
MW-63-50	0.86	0.29	-0.38	-1.03	-0.47	-0.55	-1.24	-2.08	-0.45	-	-	-	-	-	-
MW-63-91	1.16	0.48	-0.19	-0.87	-0.25	-0.16	-0.89	NA	-0.01	-	-	-	-	-	-

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BUCHANAN, NY

Well ID	LOW RIVER TIDE GROUNDWATER ELEVATIONS (Feet msl)														
	Quarter 2[1], 2007	Quarter 3[2], 2007	Quarter 4[3], 2007	Quarter 1[4], 2008	Quarter 2[5], 2008	Quarter 3[6], 2008	Quarter 4[7], 2008	Quarter 1[8], 2009	Quarter 2[9], 2009	Quarter 3[10,11], 2009	Quarter 4[12], 2009	Quarter 1[13], 2010	Quarter 2[14], 2010	Quarter 3[15], 2010	Quarter 4[16], 2010
MW-63-93	NA	0.55	-0.20	-0.87	-0.30	-0.24	-0.98	-1.68	-0.13	-	-	-	-	-	-
MW-63-112	0.03	-0.82	-1.46	-2.05	-1.69	-1.60	-2.26	-3.14	-1.45	-	-	-	-	-	-
MW-63-121	1.41	0.60	-0.18	-0.78	-0.24	-0.05	-0.86	-1.49	0.11	-	-	-	-	-	-
MW-63-163	0.70	-0.09	-0.83	-1.48	-0.86	-0.90	-1.54	-2.46	-0.98	-	-	-	-	-	-
MW-63-174	0.88	0.05	-0.65	-1.29	-0.62	-0.61	-1.19	-1.97	-0.59	-	-	-	-	-	-
MW-65-48	NA	NA	NA	NA	38.60	43.22	NA	48.19	36.98	40.08	38.06	39.94	42.26	59.97	NA
MW-65-80	NA	NA	NA	NA	34.97	32.95	32.72	33.71	33.30	33.79	32.81	33.69	33.98	49.35	NA
MW-66-21	0.26	0.17	-0.22	-0.74	0.05	0.17	0.29	-0.33	0.50	0.52	0.10	-0.01	1.82	1.05	1.02
MW-66-36	0.81	0.48	-0.04	-0.51	0.35	0.15	0.10	-0.86	0.51	-	-0.25	-0.43	1.75	1.49	0.36
MW-67-39	NA	1.02	0.34	-0.33	0.36	0.41	-0.02	-0.07	-0.56	0.81	-1.25	-0.76	-0.13	-0.09	-1.70
MW-67-105	NA	1.39	0.61	-0.04	0.57	0.65	0.16	-0.67	-0.43	-	-	-	-	-	-
MW-67-173	NA	0.75	-0.14	-0.83	-0.28	-0.26	-0.82	-1.62	-1.55	-	-	-	-	-	-
MW-67-219	NA	0.74	-0.19	-0.91	-0.32	-0.32	-0.86	-1.87	-1.59	-	-	-	-	-	-
MW-67-276	NA	1.61	0.60	-0.13	0.44	0.41	-0.14	-1.03	-0.91	-	-	-	-	-	-
MW-67-323	NA	0.18	-0.96	-1.75	-1.13	-1.35	-1.93	-2.86	-2.73	-	-	-	-	-	-
MW-67-340	NA	0.63	-0.52	-1.31	-0.87	-0.96	-1.56	-2.42	-2.40	-0.76	-3.27	-2.63	-2.26	-1.97	-3.72
MW-107	116.85	113.87	117.48	121.79	118.94	115.00	115.76	120.28	117.52	-	-	-	-	-	-
MW-108	9.58	8.61	8.77	9.98	10.07	NA	9.02	9.65	9.26	-	-	-	-	-	-
MW-109	9.52	6.80	7.22	9.50	10.12	7.82	7.88	NA	4.95	-	-	-	-	-	-
MW-111	9.56	9.66	9.74	10.74	11.24	9.74	10.48	10.87	9.47	-	-	-	-	-	-
OUT-1	NA	1.31	1.16	0.76	0.81	NA	NA	NA	1.08	-	-0.77	1.02	5.06	NA	NA
RW-1	NA	NA	30.15	NA	30.04	29.52	29.05	29.10	NA	-	-	-	-	-	-
U1-CSS	NA	8.98	NA	NA	19.11	15.39	NA	20.46	13.89	-	-	-	-	-	-
U3-1	4.20	NA	NA	NA	NA	NA	NA	NA	NA	-	-	-	-	-	-
U3-2	5.34	NA	NA	NA	NA	NA	NA	NA	NA	-	-	-	-	-	-
U3-3	7.53	6.52	6.63	8.67	9.25	8.25	8.94	9.13	7.29	-	-	-	-	-	-
U3-4D	4.25	NA	3.35	3.22	2.74	3.49	2.69	3.41	3.75	-	-	-	-	-	-
U3-4S	3.91	4.13	3.80	3.74	3.97	4.31	3.81	4.01	4.23	-	-	-	-	-	-
U3-C1	NA	1.64	3.58	3.36	0.99	2.36	0.81	0.64	1.92	2.43	0.12	0.20	2.98	NA	0.26
U3-T1	4.51	4.12	3.67	3.99	3.86	4.33	3.69	3.83	4.12	-	-	-	-	-	-
U3-T2	4.33	4.02	3.79	4.20	3.94	4.28	3.76	4.05	4.20	-	-	-	-	-	-

Notes:

NA = Data Not Available

1. Quarter 2, 2007 groundwater elevations were measured on 6/1/07 at 6:20 am.
2. Quarter 3, 2007 groundwater elevations were measured on 9/25/07 at 4:32 am.
3. Quarter 4, 2007 groundwater elevations were measured on 12/9/07 at 4:15 am.
4. Quarter 1, 2008 groundwater elevations were measured on 1/3/08 at 1:14 a.m.
5. Quarter 2, 2008 groundwater elevations were measured on 4/4/08 at 5:14 pm.
6. Quarter 3, 2008 groundwater elevations were measured on 7/10/08 at 11:35 am.
7. Quarter 4, 2008 groundwater elevations were measured on 11/11/08 at 2:51 am.
8. Quarter 1, 2009 groundwater elevations were measured on 1/9/09 at 2:42 am.
9. Quarter 2, 2009 groundwater elevations were measured on 5/22/09 at 2:41 pm.
10. Subsequent to Quarter 2, 2009, as described in our June 14, 2010 memorandum which was included as Appendix J in the Quarter 1, 2009 Report, a reduced number of transducers will be maintained in long term operation. The rationale for this reduced transducer redeployment is included in the June 14, 2010 memorandum.
11. Quarter 3, 2009 groundwater elevations were measured on 8/9/09 at 8:18 am.
12. Quarter 4, 2009 groundwater elevations were measured on 11/28/09 at 3:45 pm.
13. Quarter 1, 2010 groundwater elevations were measured on 1/30/10 at 6:00 am.
14. Quarter 2, 2010 groundwater elevations were measured on 4/09/10 at 12:06 pm.
15. Quarter 3, 2010 groundwater elevations were measured on 7/31/10 at 12:30 am.
16. Quarter 4, 2010 groundwater elevations were measured on 10/16/10 at 1:36 am.
17. MW-32 groundwater elevations from 2nd quarter, 2007 were based on an initial Waterloo Multi-Level configuration, which was subsequently reconfigured; initial depth intervals approximately corresponding to current configuration are listed in parentheses. The current configuration intervals MW-32-48 and MW-32-173 have no representative equivalent within the old configuration.

TABLE 3
FOURTH QUARTER 2010 GROUNDWATER ANALYTICAL RESULTS AND AVERAGES
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLING QUARTER[2]	SAMPLE ID	SAMPLE ZONE CENTER, Depth Ft Below Top of Casing[3]	SAMPLE ZONE CENTER, Elevation Ft msl[3]	SAMPLE COLLECTION Date	SAMPLE COLLECTION Time	TRITIUM (pCi/L) Result	TRITIUM Std. Dev.[10]	TRITIUM MDC	Sr-90 (pCi/L) Result	Sr-90 Std. Dev.[10]	Sr-90 MDC	Cs-137 (pCi/L) Result	Cs-137 Std. Dev.[10]	Cs-137 MDC	Co-60 (pCi/L) Result	Co-60 Std. Dev.[10]	Co-60 MDC	Ni-63 (pCi/L) Result	Ni-63 Std. Dev.[10]	Ni-63 MDC	YEARLY ROLLING AVERAGES[4] TRITIUM (pCi/L) Average	Sr-90 (pCi/L) Average	Cs-137 (pCi/L) Average	Co-60 (pCi/L) Average	Ni-63 (pCi/L) Average	Well ID[1]
MW-30-69	Q1-2010	329	69.3	6.4	1/27/2010	11:30	1.25E+05	3.99E+03	6.13E+02	3.42E-02	7.78E-01	3.83E-01	-3.23E-01	3.36E+00	3.68E+00	2.05E-01	3.17E+00	3.37E+00	NA	NA	NA	1.23E+05	ND	ND	ND	NA	MW-30-69
MW-30-69	Q1-2010 Mid	330	69.3	6.4	2/24/2010	12:35	1.36E+05	2.01E+03	2.05E+02	-7.42E-03	3.54E-01	5.00E-01	6.34E-01	3.79E+00	4.26E+00	-1.33E+00	3.65E+00	3.73E+00	NA	NA	NA						
MW-30-69	Q2-2010	331	69.3	6.4	4/29/2010	12:55	1.6[illegible]E+05	4.67E+03	2.73E+02	-1.31E-01	7.56E-01	3.40E-01	-2.29E+00	5.33E+00	5.59E+00	2.06E+00	5.37E+00	6.53E+00	NA	NA	NA						
MW-30-69	Q2-2010 Mid	332	69.3	6.4	6/8/2010	12:32	1.53E+05	4.49E+03	4.83E+02	2.56E-01	4.79E-01	5.40E-01	-1.20E+00	6.55E+00	7.22E+00	-1.72E-01	5.45E+00	5.99E+00	NA	NA	NA						
MW-30-69	Q3-2010	333	69.3	6.4	7/28/2010	12:33	1.28E+05	3.72E+03	1.83E+02	9.14E-02	5.26E-01	5.35E-01	-5.08E-01	9.69E+00	1.09E+01	1.67E+00	7.46E+00	9.20E+00	NA	NA	NA						
MW-30-69	Q3-2010	334	69.3	6.4	8/20/2010	15:08	1.1[illegible]E+05	3.24E+03	2.02E+02	3.53E-01	7.30E-01	3.08E-01	-3.14E+00	5.22E+00	5.12E+00	-2.41E+00	5.25E+00	5.03E+00	NA	NA	NA						
MW-30-69	Q3-2010 Mid	335	69.3	6.4	9/8/2010	12:35	1.23E+05	3.65E+03	4.47E+02	[illegible]93E-01	4.41E-01	5.14E-01	-1.10E+00	4.42E+00	4.87E+00	1.40E+00	4.72E+00	5.73E+00	NA	NA	NA						
MW-30-69	Q4-2010	336	69.3	6.4	11/5/2010	11:56	1.25E+05	1.88E+03	4.31E+02	9.69E-01	8.79E-01	[illegible]94E+00	3.68E+00	3.94E+00	7.79E+00	5.01E+00	5.09E+00	9.47E+00	NA	NA	NA						
MW-30-84	Q1-2010	320	83.8	-8.1	1/27/2010	12:15	6.60E+03	1.07E+03	6.37E+02	-1.64E-01	2.43E-01	4.02E-02	3.93E-01	3.06E+00	3.41E+00	-8.46E-01	3.03E+00	3.13E+00	NA	NA	NA	9.61E+03	ND	ND	ND	NA	MW-30-84
MW-30-84	Q1-2010 Mid	321	83.8	-8.1	2/24/2010	12:44	6.94E+03	3.63E+02	1.63E+02	1.30E-01	4.33E-01	5.06E-01	1.17E+00	4.58E+00	5.35E+00	9.09E-01	4.74E+00	5.54E+00	NA	NA	NA						
MW-30-84	Q2-2010	322	83.8	-8.1	4/29/2010	13:40	9.50E+03	5.40E+02	1.45E+02	4.08E-01	8.33E-01	3.50E-01	-3.84E-01	5.71E+00	6.30E+00	2.19E+00	5.30E+00	6.57E+00	NA	NA	NA						
MW-30-84	Q2-2010 Mid	323	83.8	-8.1	6/8/2010	12:19	9.40E+03	4.37E+02	2.14E+02	2.01E-01	4.35E-01	5.52E-01	7.20E-01	5.49E+00	6.21E+00	-4.01E+00	6.36E+00	6.13E+00	NA	NA	NA						
MW-30-84	Q3-2010	324	83.8	-8.1	7/28/2010	13:07	9.26E+03	5.09E+02	1.01E+02	4.48E-01	7.63E-01	3.52E-01	-1.46E+00	9.30E+00	1.02E+01	-3.03E-01	9.79E+00	1.08E+01	NA	NA	NA						
MW-30-84	Q3-2010	325	83.8	-8.1	8/20/2010	16:5[illegible]	1.00E+04	5.57E+02	1.29E+02	5.65E-01	8.70E-01	3.53E-01	3.22E+00	6.27E+00	7.54E+00	-3.97E+00	6.69E+00	6.20E+00	NA	NA	NA						
MW-30-84	Q3-2010 Mid	326	83.8	-8.1	9/8/2010	13:14	1.0[illegible]E+04	4.32E+02	2.10E+02	3.16E-01	6.30E-01	7.05E-01	-1.46E+00	6.18E+00	6.74E+00	-4.19E-01	7.65E+00	8.53E+00	NA	NA	NA						
MW-30-84	Q4-2010	327	83.8	-8.1	11/5/2010	12:35	1.03E+04	4.80E+02	3.87E+02	5.25E-01	7.56E-01	[illegible]	-3.07E+00	4.23E+00	8.38E+00	-5.22E+00	4.86E+00	8.20E+00	NA	NA	NA						
MW-31-49	Q1-2010	321	43.8	26.3	1/26/2010	13:07	4.46E+02	1.35E+02	1.12E+02	[illegible]88E-01	7.59E-01	3.05E-01	-4.18E-01	5.33E+00	4.07E+00	-1.34E+00	3.84E+00	3.99E+00	NA	NA	NA	2.83E+04	ND	ND	ND	NA	MW-31-49
MW-31-49	Q1-2010 Mid	322	43.8	26.3	3/5/2010	11:30	4.89E+02	1.71E+02	1.69E+02	[illegible]47E-02	3.51E-01	4.50E-01	-4.63E-01	4.52E+00	5.10E+00	1.13E+00	4.83E+00	5.71E+00	NA	NA	NA						
MW-31-49	Q2-2010	323	43.8	26.3	4/14/2010	10:42	1.16E+04	3.90E+02	1.00E+02	[illegible]18E-01	4.62E-01	5.72E-01	-2.95E+00	8.54E+00	9.00E+00	9.25E-03	8.91E+00	9.95E+00	NA	NA	NA						
MW-31-49	Q2-2010 Mid	324	43.8	26.3	6/7/2010	11:30	1.73E+04	5.79E+02	2.22E+02	3.41E-01	7.95E-01	3.18E-01	-3.80E+00	7.42E+00	7.51E+00	1.82E+00	6.72E+00	8.03E+00	NA	NA	NA						
MW-31-49	Q3-2010	325	43.8	26.3	7/27/2010	14:43	5.46E+04	1.59E+03	1.21E+02	3.05E-01	4.71E-01	5.22E-01	2.74E+00	1.17E+01	1.40E+01	2.23E+00	8.03E+00	9.95E+00	NA	NA	NA						
MW-31-49	Q3-2010	326	43.8	26.3	8/23/2010	12:1[illegible]	[illegible]	3.56E+02	1.23E+02	[illegible]62E-01	7.39E-01	3.57E-01	-1.21E+00	5.42E+00	5.91E+00	-3.25E-02	5.19E+00	5.83E+00	NA	NA	NA						
MW-31-49	Q3-2010 Mid	327	43.8	26.3	9/7/2010	13:49	1.04E+05	3.02E+03	1.63E+02	1.15E-01	2.32E-01	1.23E-01	3.35E+00	5.52E+00	6.68E+00	2.16E+00	5.97E+00	7.20E+00	NA	NA	NA						
MW-31-49	Q4-2010	328	43.8	26.3	11/3/2010	11:55	3.35E+04	9.81E+02	1.15E+02	-3.04E-02	4.36E-01	5.51E-01	-2.82E+00	8.51E+00	8.97E+00	2.22E+00	8.87E+00	1.05E+01	NA	NA	NA						
MW-31-63	Q1-2010	321	63.3	12.3	1/26/2010	13:08	3.30E+04	2.21E+03	6.65E+02	5.46E-01	8.55E-01	4.50E-01	1.53E+00	3.12E+00	3.68E+00	-1.55E+00	3.36E+00	3.53E+00	NA	NA	NA	4.77E+04	ND	ND	ND	NA	MW-31-63
MW-31-63	Q1-2010 Mid	322	63.3	12.3	3/5/2010	12:1[illegible]	7.35E+04	1.11E+03	1.72E+02	[illegible]20E-01	3.38E-01	4.02E-01	2.57E+00	4.49E+00	5.38E+00	-3.85E+00	4.62E+00	4.24E+00	NA	NA	NA						
MW-31-63	Q2-2010	323	63.3	12.3	4/14/2010	13:05	1.84E+04	5.46E+02	1.08E+02	1.50E-01	4.43E-01	5.61E-01	4.58E+00	9.18E+00	9.12E+00	2.75E-01	9.97E+00	1.12E+01	NA	NA	NA						
MW-31-63	Q2-2010 Mid	324	63.3	12.3	6/7/2010	12:19	5.1[illegible]E+04	1.53E+03	2.93E+02	3.68E-01	8.04E-01	3.11E-01	2.95E+00	5.94E+00	7.20E+00	9.47E-01	6.12E+00	7.09E+00	NA	NA	NA						
MW-31-63	Q3-2010	325	63.3	12.3	7/27/2010	15:54	6.17E+04	1.80E+03	1.27E+02	5.31E-01	6.45E-01	5.89E-01	-1.81E+00	8.27E+00	8.91E+00	1.22E+00	7.33E+00	8.70E+00	NA	NA	NA						
MW-31-63	Q3-2010	326	63.3	12.3	8/23/2010	13:1[illegible]	6.69E+04	1.95E+03	1.63E+02	4.60E-01	7.62E-01	3.48E-01	1.77E+00	6.11E+00	7.13E+00	-1.67E+00	6.17E+00	6.44E+00	NA	NA	NA						
MW-31-63	Q3-2010 Mid	327	63.3	12.3	9/7/2010	15:28	4.65E+04	1.41E+03	1.45E+02	3.99E-01	7.26E-01	3.18E-01	4.75E-01	4.75E+00	5.31E+00	-1.47E+00	5.45E+00	5.55E+00	NA	NA	NA						
MW-31-63	Q4-2010	328	63.3	12.3	11/3/2010	12:32	2.95E+04	9.02E+02	1.14E+02	3.31E-01	6.30E-01	7.13E-01	-2.24E+00	9.62E+00	1.02E+01	3.44E+00	8.40E+00	1.07E+01	NA	NA	NA						
MW-31-85	Q1-2010	321	84.8	-9.2	1/26/2010	12:08	2.25E+04	1.83E+03	6.64E+02	-3.53E-02	7.38E-01	3.43E-02	5.22E-01	2.96E+00	3.33E+00	1.5[illegible]E+00	2.96E+00	3.43E+00	NA	NA	NA	7.53E+03	ND	ND	ND	NA	MW-31-85
MW-31-85	Q1-2010 Mid	322	84.8	-9.2	3/5/2010	11:49	2.69E+03	2.52E+02	1.63E+02	[illegible]39E-01	3.31E-01	3.88E-01	1.23E+00	4.34E+00	5.05E+00	4.43E-01	4.46E+00	5.01E+00	NA	NA	NA						
MW-31-85	Q2-2010	323	84.8	-9.2	4/14/2010	12:00	4.85E+03	2.60E+02	9.93E+01	-1.42E-01	4.33E-01	5.36E-01	3.34E+00	6.90E+00	8.60E+00	1.47E-01	6.13E+00	6.84E+00	NA	NA	NA						
MW-31-85	Q2-2010 Mid	324	84.8	-9.2	6/7/2010	12:00	9.34E+03	4.35E+02	2.13E+02	3.29E-01	5.73E-01	5.43E-01	2.30E+00	4.86E+00	5.78E+00	-1.07E+00	4.70E+00	4.81E+00	NA	NA	NA						
MW-31-85	Q3-2010	325	84.8	-9.2	7/27/2010	15:22	6.70E+03	4.34E+02	1.03E+02	3.55E-01	4.72E-01	5.04E-01	-3.98E+00	8.82E+00	9.22E+00	2.50E+00	8.43E+00	9.93E+00	NA	NA	NA						
MW-31-85	Q3-2010	326	84.8	-9.2	8/23/2010	12:10	5.07E+03	3.96E+02	1.25E+02	6.61E-02	7.39E-01	3.16E-01	3.12E+00	4.95E+00	6.08E+00	1.53E+00	4.77E+00	5.71E+00	NA	NA	NA						
MW-31-85	Q3-2010 Mid	327	84.8	-9.2	9/7/2010	14:14	6.2[illegible]E+03	5.24E+02	1.44E+02	-3.25E-01	4.45E-01	3.85E-01	-1.54E+00	5.68E+00	6.11E+00	2.7[illegible]E+00	6.42E+00	7.79E+00	NA	NA	NA						
MW-31-85	Q4-2010	328	84.8	-9.2	11/3/2010	12:00	6.06E+03	4.16E+02	1.14E+02	2.41E-01	4.33E-01	5.47E-01	-1.36E+00	8.88E+00	9.62E+00	-2.66E-01	1.08E+01	1.19E+01	NA	NA	NA						
MW-32-48	Q1-2010	305	43.3	28.8	3/4/2010	13:16	4.53E+04	7.44E+02	1.63E+02	[illegible]02E-01	7.47E-01	7.27E-01	-1.65E-01	3.88E+00	4.41E+00	-5.57E-01	4.11E+00	4.54E+00	NA	NA	NA	2.31E+04	ND	ND	ND	NA	MW-32-48
MW-32-48	Q2-2010	306	43.3	28.8	4/28/2010	11:28	6.13E+04	1.80E+03	1.72E+02	7.51E-01	8.02E-01	3.21E-01	3.11E+00	7.80E+00	7.62E+00	1.33E+00	6.18E+00	7.25E+00	NA	NA	NA						
MW-32-48	Q3-2010	307	43.3	28.8	7/27/2010	12:52	3.69E+03	3.26E+02	9.94E+01	3.59E-01	8.37E-01	7.60E-01	1.54E-01	7.00E+00	8.04E+00	-3.85E+00	7.74E+00	7.51E+00	NA	NA	NA						
MW-32-48	Q3-2010	308	43.3	28.8	8/24/2010	14:03	5.90E+03	3.51E+02	2.13E+02	3.55E-01	6.33E-01	7.09E-01	-4.34E-01	4.49E+00	5.04E+00	1.96E+00	4.95E+00	5.95E+00	NA	NA	NA						
MW-32-59	Q1-2010	315	53.8	18.3	1/28/2010	14:0[illegible]	8.93E+04	3.45E+03	6.39E+02	4.07E-02	3.15E-01	4.04E-01	1.12E+00	4.07E+00	4.72E+00	3.06E+00	3.93E+00	4.92E+00	NA	NA	NA	7.02E+04	ND	ND	ND	NA	MW-32-59
MW-32-59	Q1-2010 Mid	316	53.8	18.3	3/4/2010	13:2[illegible]	[illegible]	1.10E+03	1.67E+02	[illegible]	6.31E-01	7.80E-01	6.55E-01	5.36E+00	4.46E+00	-1.41E+00	5.22E+00	4.34E+00	NA	NA	NA						
MW-32-59	Q2-2010	317	53.8	18.3	4/28/2010	11:30	6.83E+04	2.00E+03	1.83E+02	-3.10E-01	3.61E-01	5.30E-01	4.25E+00	4.86E+00	6.21E+00	1.55E+00	4.86E+00	5.81E+00	NA	NA	NA						
MW-32-59	Q2-2010 Mid	318	53.8	18.3	6/9/2010	14:53	1.55E+05	4.58E+03	4.83E+02	4.10E-01	7.75E-01	3.75E-01	-9.71E-01	6.12E+00	6.76E+00	1.43E+00	6.66E+00	7.93E+00	NA	NA	NA						
MW-32-59	Q3-2010	319	53.8	18.3	7/27/2010	13:00	6.54E+04	1.91E+03	1.33E+02	[illegible]50E-01	4.37E-01	5.21E-01	1.37E+00	1.02E+01	1.14E+01	3.80E+00	9.26E+00	1.21E+01	NA	NA	NA						
MW-32-59	Q3-2010	320	53.8	18.3	8/24/2010	14:27	5.73E+03	3.48E+02	2.11E+02	-3.82E-02	6.54E-01	3.32E-01	3.21E+00	5.84E+00	7.14E+00	-2.01E+00	6.60E+00	6.75E+00	NA	NA	NA						
MW-32-59	Q3-2010 Mid	321	53.8	18.3	9/9/2010	13:57	7.44E+04	2.18E+03	1.67E+02	4.21E-01	7.20E-01	3.03E-01	1.58E+00	5.43E+00	6.39E+00	-1.53E+00	5.38E+00	5.54E+00	NA	NA	NA						
MW-32-59	Q4-2010	322	53.8	18.3	11/3/2010	12:08	1.58E+04	6.66E+02	1.15E+02	2.02E-01	6.15E-01	7.14E-01	6.57E+00	7.98E+00	1.03E+01	1.19E+00	9.11E+00	1.05E+01	NA	NA	NA						
MW-32-85	Q1-2010	318	85.3	85.3	1/28/2010	14:38	8.03E+03	1.11E+03	4.29E+02	6.86E-01	8.38E-01	3.91E-01	2.41E+00	3.65E+00	4.20E+00	2.29E+00	3.27E+00	4.05E+00	NA	NA	NA	1.20E+04	ND	ND	ND	NA	MW-32-85
MW-32-85	Q1-2010 Mid	319	85.3	85.3	3/4/2010	14:44	9.3[illegible]E+03	3.62E+02	1.63E+02	-2.46E-01	4.71E-01	7.01E-01	3.52E-01	3.45E+00	3.85E+00	-1.25E+00	3.88E+00	4.04E+00	NA	NA	NA						
MW-32-85	Q2-2010	320	85.3	85.3	4/28/2010	13:08	1.15E+04	5.85E+02	1.45E+02	3.95E-02	6.03E-01	7.62E-01	7.18E-01	9.07E+00	9.43E+00	1.03E+00	6.79E+00	8.05E+00	NA	NA	NA						
MW-32-85	Q2-2010 Mid	321	85.3	85.3	6/9/2010	12:03	1.20E+04	4.85E+02	2.14E+02	3.30E-01	7.56E-01	3.66E-01	-1.92E+00	5.57E+00	6.05E+00	-7.73E-01	5.68E+00	6.33E+00	NA	NA	NA						
MW-32-85	Q3-2010	322	85.3	85.3	7/27/2010	14:5[illegible]	1.2[illegible]E+04	5.81E+02	1.01E+02	3.80E-01	6.37E-01	7.07E-01	1.38E+00	7.47E+00	8.69E+00	2.30E+00	7.74E+00	9.52E+00	NA	NA	NA						
MW-32-85	Q3-2010	323	85.3	85.3	8/24/2010	11:03	1.33E+04	4.94E+02	2.13E+02	-3.76E-01	4.75E-01	7.02E-01	-6.66E-01	5.96E+00	6.62E+00	-1.19E+00	5.22E+00	5.43E+00	NA	NA	NA						
MW-32-85	Q3-2010 Mid	324	85.3	85.3	9/9/2010	15:29	1.44E+04	6.57E+02	1.27E+02	[illegible]34E-01	6.77E-01	3.36E-01	1.43E+00	6.27E+00	6.90E+00	-1.25E-01	5.49E+00	6.13E+00	NA	NA	NA						
MW-32-85	Q4-2010	325	85.3	85.3	11/3/2010	12:45	1.49E+04	6.48E+02	1.15E+02	3.80E-01	4.90E-01	5.30E-01	5.39E+00	9.61E+00	1.18E+01	-5.55E+00	8.71E+00	7.61E+00	NA	NA	NA						
MW-32-149	Q1-2010	316	149.3	-72.2	1/28/2010	11:47	5.38E+03	9.24E+02	4.30E+02	2.03E-01	7.48E-01	3.83E-01	2.15E+00	3.71E+00	4.43E+00	4.53E-01	4.17E+00	4.73E+00	NA	NA	NA	4.53E+03	ND	ND	ND	NA	MW-32-149
MW-32-149	Q2-2010	317	149.3	-72.2	4/28/2010	13:50	6.60E+03	4.52E+02	1.47E+02	3.03E-01	7.08E-01	3.24E-01	1.98E+00	6.88E+00	7.55E+00	9.80E-01	4.44E+00	5.35E+00	NA	NA	NA						
MW-32-149	Q2-2010 Mid	318	149.3	-72.2	6/9/2010	12:52	9.76E+03	4.44E+02	2.14E+02	-1.16E-01	6.45E-01	3.05E-01	-8.57E-01	8.36E+00	9.08E+00	-4.49E+00	6.20E+00	5.62E+00	NA	NA	NA						
MW-32-149	Q3-2010	319	149.3	-72.2	7/27/2010	15:34	3.8[illegible]E+03	3.33E+02	1.01E+02	[illegible]14E-01	3.37E-01	4.33E-01	7.24E-01	1.28E+01	1.64E+01	1.53E+00	8.88E+00	1.09E+01	NA	NA	NA						
MW-32-149	Q3-2010	320	149.3	-72.2	8/24/2010	11:27	2.60E+03	2.70E+02	2.13E+02	[illegible]	6.64E-01	3.13E-01	1.04E-01	6.51E+00	7.44E+00	2.67E-02	5.89E+00	6.71E+00	NA	NA	NA						
MW-32-149	Q3-2010 Mid	321	149.3	-72.2	9/9/2010	11:36	2.13E+03	2.70E+02	1.27E+02	2.27E-01	7.72E-01	3.22E-01	3.58E+00	7.83E+00	9.16E+00	1.24E+00	8.52E+00	1.00E+01	NA	NA	NA						
MW-32-149	Q4-2010	322	149.3	-72.2	11/3/2010	16:09	1.55E+03	2.24E+02	1.12E+02	4.08E-01	5.02E-01	5.49E-01	-1.00E+01	1.08E+01	1.15E+01	3.36E+00	7.71E+00	9.94E+00	NA	NA	NA						
MW-32-173	Q1-2010	314	172.8	-95.7	1/28/2010	11:43	1.33E+03	6.95E+02	6.63E+02	[illegible]67E-01	7.37E-01	3.74E-01	-4.48E+00	7.32E+00	7.64E+00	2.11E+00	4.42E+00	5.30E+00	NA	NA	NA	1.89E+03	ND	ND	ND	NA	MW-32-173
MW-32-173	Q2-2010	315	172.8	-95.7	4/28/2010	15:45	1.54E+03	2.45E+02	1.43E+02	4.63E-01	5.34E-01	5.49E-01	4.36E+00	5.45E+00	6.79E+00	-8.08E-01	4.93E+00	5.21E+00	NA	NA	NA						
MW-32-173	Q2-2010 Mid	316	172.8	-95.7	6/9/2010	12:23	2.34E+03	2.66E+02	2.08E+02	3.04E-01	5.97E-01	5.81E-01	-9.18E-01	6.63E+00	7.29E+00	8.09E-01	6.48E+00	7.43E+00	NA	NA	NA						
MW-32-173	Q3-2010	317	172.8	-95.7	7/27/2010	15:1[illegible]	2.47E+03	2.69E+02	9.88E+01	9.64E-02	3.38E-01	4.14E-01	-1.51E+00	8.71E+00	9.65E+00	-2.29E+00	7.04E+00	7.12E+00	NA	NA	NA						
MW-32-173	Q3-2010	318	172.8	-95.7	8/24/2010	11:23	2.19E+03	2.60E+02	2.13E+02	1.37E-01	3.98E-01	5.77E-01	2.22E+00	6.57E+00	7.82E+00	4.55E-01	6.55E+00	7.41E+00	NA	NA	NA						
MW-32-173	Q3-2010 Mid	319	172.8	-95.7	9/9/2010	11:29	1.98E+03	2.63E+02	1.28E+02	5.82E-01	8.34E-01	3.96E-01	1.57E+00	4.86E+00	5.81E+00	9.94E-01	4.84E+00	5.77E+00	NA	NA	NA						
MW-32-173	Q4-2010	320	172.8	-95.7	11/3/2010	15:53	1.40E+03	2.16E+02	1.14E+02	[illegible]65E-02	4.38E-01	5.24E-01	3.37E+00	1.76E+01	9.62E+00	-2.94E+00	9.88E+00	1.01E+01	NA	NA	NA						
MW-32-190	Q1-2010	317	190.3	-113.7	1/28/2010	11:5[illegible]	1.7[illegible]E+03	5.91E+02	4.25E+02	[illegible]33E-01	4.97E-01	5.09E-01	-1.94E-02	4.22E+00	4.80E+00	1.29E+00	4.62E+00	5.45E+00	NA	NA	NA	1.69E+03	ND	ND	ND	NA	MW-32-190
MW-32-190	Q1-2010	318	190.3	-113.7	3/4/2010	12:42	1.93E+03	2.10E+02	1.67E+02	[illegible]99E-02	5.73E-01	7.52E-01	6.41E-01	3.20E+00	3.70E+00	3.53E+00	3.74E+00	4.67E+00	NA	NA	NA						
MW-32-190	Q2-2010	319	190.3	-113.7	4/28/2010	15:5[illegible]	1.59E+03	2.48E+02	1.49E+02	-2.92E-01	7.01E-01	3.85E-01	1.32E+00	5.66E+00	6.65E+00	-2.37E+00	5.38E+00	5.33E+00	NA	NA	NA						
MW-32-190	Q2-2010 Mid	320	190.3	-113.7	6/9/2010	12:43	1.76E+03	2.45E+02	2.05E+02	4.69E-01	8.43E-01	3.49E-01	-3.64E+00	5.89E+00	6.02E+00	1.50E+00	5.84E+00	6.92E+00	NA	NA	NA						
MW-32-190	Q3-2010	321	190.3	-113.7	7/27/2010	15:4[illegible]	1.58E+03	2.21E+02	9.83E+01	-3.57E-03	3.32E-01	3.06E-01	6.23E-01	7.98E+00	9.16E+00	-2.62E+00	7.77E+00	7.60E+00	NA	NA	NA						
MW-32-190	Q3-2010	322	190.3	-113.7	8/24/2010	11:37	1.69E+03	2.43E+02	2.03E+02	[illegible]54E-01	7.24E-01	3.25E-01	-5.47E-01	4.84E+00	5.45E+00	9.07E-01	4.96E+00	5.87E+00	NA	NA	NA						
MW-32-190	Q3-2010 Mid	323	190.3	-113.7	9/9/2010	11:34	1.65E+03	2.48E+02	1.33E+02	-1.31E-01	5.85E-01	3.27E-01	-2.39E-01	9.87E+00	1.08E+01	2.00E+00	6.66E+00	7.93E+00	NA	NA	NA						
MW-32-190	Q4-2010	324	190.3	-113.7	11/3/2010	16:07	1.53E+03	2.28E+02	1.17E+02	-9.74E-03	4.35E-01	5.82E-01	2.12E+00	9.02E+00	1.07E+01	-2.43E+00	9.21E+00	9.35E+00	NA	NA	NA						
MW-33	Q1-2010	325	13.2	-0.4	2/2/2010	13:15	3.20E+04	2.10E+03	4.38E+02	-1.15E-01	7.38E-01	3.21E-01	2.34E+00	3.44E+00	4.21E+00	4.59E-01	3.96E+00	4.42E+00	NA	NA	NA	3.57E+04	ND	ND	ND	NA	MW-33
MW-33	Q2-2010	326	13.2	-0.4	4/15/2010	13:54	6.3[illegible]E+04	1.06E+03	1.75E+02	-1.77E-01	6.60E-01	3.85E-01	-3.35E+00	7.39E+00	7.21E+00	-5.17E+00	7.74E+00	6.17E+00	NA	NA	NA						
MW-33	Q3-2010	327	13.2	-0.4	8/30/2010	14:29	3.69E+03	3.42E+02	1.25E+02	[illegible]64E-01	3.34E-01	3.69E-01	7.72E-01	5.64E+00	6.38E+00	-3.08E-01	5.07E+00	5.60E+00	NA	NA	NA						
MW-33	Q3-2010 Mid	328	13.2	-0.4	9/11/2010	13:28	3.86E+03	3.53E+02	1.27E+02	9.96E-03	7.38E-01	3.28E-01	-1.30E+00	4.86E+00	5.14E+00	1.13E+00	5.10E+00	5.95E+00	NA	NA	NA						
MW-35	Q3-2010 Mid	320	9	0.4	5/20/2010	13:35	2.82E+03	2.87E+02	2.14E+02	1.97E-01	4.52E-01	5.73E-01	1.51E+00	5.67E+00	6.71E+00	1.24E+00	6.33E+00	6.84E+00	NA	NA	NA	2.82E+03	ND	ND	ND	NA	MW-35
MW-36-24	Q1-2010	317	15.1	-4.3	2/1/2010	13:49	6.60E+02	5.97E+02	6.13E+02	2.81E-01	8.84E-01	3.46E-01	2.13E+00	3.24E+00	3.80E+00	0.00E+00	4.13E+00	4.27E+00	NA	NA	NA	1.77E+03	ND	ND	ND	NA	MW-36-24
MW-36-24	Q2-2010	318	15.1	-4.3	4/28/2010	14:14	3.53E+03	3.39E+02	1.45E+02	[illegible]91E-01	5.60E-01	5.67E-01	1.74E+00	5.87E+00	6.86E+00	2.13E+00	5.66E+00	6.85E+00	NA	NA	NA						
MW-36-24	Q3-2010	319	15.1	-4.3	7/29/2010	12:04	2.64E+02	1.17E+02	1.03E+02	2.45E-01	3.84E-01	4.23E-01	8.39E-01	9.88E+00	1.10E+01	-2.61E+00	1.19E+01	1.25E+01	NA	NA	NA						
MW-36-24	Q4-2010	320	15.1	4.3	11/4/2010	16:15	2.62E+03	2.82E+02	1.13E+02	3.79E-01	5.31E-01	5.42E-01	3.12E+00	9.88E+00	1.17E+01	1.83E+00	1.16E+01	1.25E+01	NA	NA	NA						
MW-36-41	Q1-2010	311	37	-25.2	2/1/2010	12:29	9.56E+03	1.30E+03	6.05E+02	4.60E+00	9.53E-01	4.44E-01	1.56E+00	4.23E+00	4.78E+00	0.00E+00	4.35E+00	5.71E+00	NA	NA	NA	1.26E+04	3.39E+00	ND	ND	NA	MW-36-41
MW-36-41	Q2-2010	312	37	-25.2	4/28/2010	15:38	1.56E+04	6.89E+02	1.53E+02	5.95E+00	1.10E+00	5.74E-01	1.38E+00	6.43E+00	6.92E+00	8.55E-01	5.70E+00	6.63E+00	NA	NA	NA						
MW-36-41	Q3-2010	313	37	-25.2	7/29/2010	12:23	1.30E+04	7.52E+02	1.45E+02	1.88E+00	7.41E-01	5.17E-01	-1.84E+00	6.35E+00	6.48E+00	4.07E+00	6.12E+00	7.75E+00	NA	NA	NA						
MW-36-41	Q4-2010	314	37	-25.2	11/4/2010	16:55	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.01E+01	[illegible]	[illegible]	1.10E+01	NA	NA	NA						
MW-36-52	Q1-2010	316	42.7	-37.9	3/1/2010	15:28	5.97E+03	1.03E+03	6.42E+02	2.12E+00	6.87E-01	4.50E-01	-3.34E+00	6.50E+00	6.30E+00	-1.13E+00	3.79E+00	4.07E+00	NA	NA	NA	7.15E+03	4.37E+00	ND	ND	NA	MW-36-52
MW-36-52	Q2-2010	317	42.7	-37.9	4/28/2010	15:40	8.49E+03	5.09E+02	1.47E+02	5.36E+00	1.25E+00	5.85E-01	2.29E+00	5.31E+00	6.27E+00	2.93E+00	4.80E+00	6.12E+00	NA	NA	NA						
MW-36-52	Q3-2010	318	42.7	-37.9	7/29/2010	12:24	7.07E+03	4.46E+02	1.03E+02	-1.52E-01	6.33E-01	3.23E-01	-1.03E+00	7.79E+00	8.33E+00	-1.74E+00	9.63E+00	1.03E+01	NA	NA	NA						
MW-36-52	Q4-2010	319	42.7	-37.9	11/4/2010	15:55	7.03E+03	4.40E+02	1.11E+02	4.73E+00	1.11E+00	5.76E-01	1.15E-01	5.89E+00	6.52E+00	-2.23E+00	7.92E+00	7.73E+00	NA	NA	NA						

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Table 3 - Fourth Quarter 2010 Groundwater Analytical Results and Averages.xlsx,
Q4 2010 TABLE3

See Page 5 for Notes

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TABLE 3
FOURTH QUARTER 2010 GROUNDWATER ANALYTICAL RESULTS AND AVERAGES
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLING QUARTER[2]	SAMPLE ID	SAMPLE ZONE CENTER, Depth Ft Below Top of Casing[2]	SAMPLE ZONE CENTER, Elevation Ft msl[3]	SAMPLE COLLECTION Date	SAMPLE COLLECTION Time	TRITIUM (pCi/L) Result	TRITIUM (pCi/L) Std. Dev.[10]	TRITIUM (pCi/L) MDC	Sr-90 (pCi/L) Result	Sr-90 (pCi/L) Std. Dev.[10]	Sr-90 (pCi/L) MDC	Cs-137 (pCi/L) Result	Cs-137 (pCi/L) Std. Dev.[10]	Cs-137 (pCi/L) MDC	Co-60 (pCi/L) Result	Co-60 (pCi/L) Std. Dev.[10]	Co-60 (pCi/L) MDC	Ni-63 (pCi/L) Result	Ni-63 (pCi/L) Std. Dev.[10]	Ni-63 (pCi/L) MDC	YEARLY ROLLING AVERAGES[4] TRITIUM (pCi/L) Average	Sr-90 (pCi/L) Average	Cs-137 (pCi/L) Average	Co-60 (pCi/L) Average	Ni-63 (pCi/L) Average	Well ID[1]
MW-37-22	Q1-2010	017	17	-2	1/29/2010	15:34	5.54E+03	9.63E+02	4.47E+03	1.33E+00	1.46E+00	4.07E-01	9.10E-01	3.98E+00	4.49E+00	-4.43E-01	4.51E+00	4.93E+00	NA	NA	NA	5.69E+03	1.10E-01	ND	ND	NA	MW-37-22
MW-37-22	Q2-2010	018	17	-2	4/27/2010	13:23	9.06E+03	4.26E+02	2.09E+02	1.29E+00	1.68E+00	5.44E-01	-1.08E+00	5.73E+00	5.64E+00	1.34E+00	4.41E+00	5.29E+00	NA	NA	NA						
MW-37-22	Q3-2010	019	17	-2	8/5/2010	14:06	3.70E+03	3.26E+02	9.93E+01	5.19E+00	1.19E+00	9.19E-01	-1.60E+00	7.62E+00	8.20E+00	4.53E+00	7.13E+00	9.75E+00	NA	NA	NA						
MW-37-22	Q4-2010	020	17	-2	11/4/2010	14:26	4.46E+03	3.57E+02	1.12E+02	1.36E+00	1.13E+00	5.33E-01	-2.26E+00	7.33E+00	7.66E+00	-1.24E+00	9.31E+00	1.00E+01	NA	NA	NA						
MW-37-32	Q1-2010	017	39	-14	1/29/2010	15:43	5.60E+03	1.05E+03	6.73E+03	1.03E+00	1.39E+00	4.73E-01	1.14E+00	3.51E+00	3.99E+00	-5.67E-01	3.75E+00	4.02E+00	NA	NA	NA	5.93E+03	1.77E-01	ND	ND	NA	MW-37-32
MW-37-32	Q2-2010	018	39	-14	4/27/2010	17:25	7.24E+03	3.90E+02	2.10E+02	1.87E+00	2.28E+00	5.59E-01	6.35E-01	5.87E+00	6.72E+00	-2.27E+00	4.88E+00	4.69E+00	NA	NA	NA						
MW-37-32	Q3-2010	019	39	-14	8/5/2010	14:00	4.80E+03	3.69E+02	9.97E+01	1.41E+00	1.85E+00	5.42E-01	-5.90E+00	8.89E+00	8.07E+00	-3.93E-01	8.67E+00	9.54E+00	NA	NA	NA						
MW-37-32	Q4-2010	020	39	-14	11/4/2010	13:14	5.99E+03	4.22E+02	1.17E+02	-2.91E-01	6.[illegible]5E-01	7.91E-01	-4.11E+00	7.41E+00	7.07E+00	1.54E+00	7.68E+00	9.04E+00	NA	NA	NA						
MW-37-40	Q1-2010	017	39.2	-24.2	1/29/2010	12:57	4.70E+03	8.82E+02	4.33E+02	1.25E+00	1.44E+00	4.29E-01	7.58E-01	5.10E+00	5.66E+00	-1.29E+00	4.93E+00	5.38E+00	NA	NA	NA	5.87E+03	1.42E-01	ND	ND	NA	MW-37-40
MW-37-40	Q2-2010	018	39.2	-24.2	4/27/2010	12:43	5.37E+03	3.45E+02	2.07E+02	1.71E+00	1.81E+00	5.52E-01	-2.56E+00	4.54E+00	4.41E+00	-7.35E-02	5.03E+00	5.51E+00	NA	NA	NA						
MW-37-40	Q3-2010	019	39.2	-24.2	8/5/2010	14:25	7.00E+03	4.43E+02	9.93E+01	1.43E+00	1.74E+00	4.81E-01	3.15E-01	7.86E+00	9.00E+00	3.83E+00	7.44E+00	9.31E+00	NA	NA	NA						
MW-37-40	Q4-2010	020	39.2	-24.2	11/4/2010	12:06	6.41E+03	4.29E+02	1.15E+02	1.28E+00	1.52E+00	5.32E-01	2.77E+00	8.59E+00	1.03E+01	2.01E+00	8.29E+00	8.30E+00	NA	NA	NA						
MW-37-57	Q1-2010	017	53.2	-38.2	1/29/2010	15:43	5.07E+03	9.08E+02	4.31E+02	1.76E+00	1.80E+00	4.25E-01	1.11E+00	4.16E+00	4.74E+00	5.45E-01	3.90E+00	4.53E+00	NA	NA	NA	6.07E+03	1.34E-01	ND	ND	NA	MW-37-57
MW-37-57	Q2-2010	018	53.2	-38.2	4/27/2010	17:28	5.20E+03	3.50E+02	2.15E+02	1.90E+00	2.15E+00	5.60E-01	-5.08E+00	7.63E+00	7.24E+00	1.7[illegible]E+00	6.43E+00	7.85E+00	NA	NA	NA						
MW-37-57	Q3-2010	019	53.2	-38.2	8/5/2010	13:59	7.30E+03	4.52E+02	9.94E+01	1.73E+00	1.69E+00	5.57E-01	-2.16E+00	7.37E+00	7.75E+00	-6.93E-01	8.96E+00	9.77E+00	NA	NA	NA						
MW-37-57	Q4-2010	020	53.2	-38.2	11/4/2010	13:49	6.72E+03	4.41E+02	1.15E+02	1.97E+00	2.15E+00	5.70E-01	6.72E+00	1.52E+01	9.04E+00	3.63E+00	7.95E+00	7.35E+00	NA	NA	NA						
MW-39-67	Q2-2010	008	67	13	5/4/2010	15:23	3.79E+02	2.01E+02	2.13E+02	1.26E+00	6.60E-01	5.33E-01	4.56E-01	5.42E+00	6.14E+00	1.30E+00	6.75E+00	7.87E+00	NA	NA	NA	3.33E+02	1.55E+00	ND	ND	NA	MW-39-67
MW-39-67	Q3-2010	009	67	13	7/22/2010	14:26	2.86E+02	1.19E+02	9.93E+01	1.73E+00	6.00E-01	3.90E-01	2.94E+00	6.33E+00	7.80E+00	-5.65E+00	7.25E+00	5.04E+00	NA	NA	NA						
MW-39-67	Q4-2010	010	67	13	11/15/2010	16:28	3.74E+02	1.86E+02	3.83E+02	1.96E+00	9.36E-01	1.94E+00	-1.74E+00	3.99E+00	8.40E+00	-3.17E+00	4.38E+00	8.38E+00	NA	NA	NA						
MW-39-84	Q2-2010	008	83.5	-3.5	5/4/2010	15:33	2.25E+02	1.95E+02	2.13E+02	1.26E+00	6.80E-01	5.63E-01	1.07E+00	5.85E+00	6.81E+00	-2.75E+00	5.78E+00	5.93E+00	NA	NA	NA	2.98E+02	1.35E+00	ND	ND	NA	MW-39-84
MW-39-84	Q3-2010	009	83.5	-3.5	7/22/2010	14:43	3.70E+02	1.30E+02	1.01E+02	8.43E-01	6.21E-01	5.85E-01	-3.32E+00	6.79E+00	6.90E+00	2.43E+00	6.95E+00	8.54E+00	NA	NA	NA						
MW-39-84	Q4-2010	010	83.5	-3.5	11/15/2010	16:38	2.5[illegible]E+02	2.10E+02	4.59E+02	1.80E+00	8.83E-01	1.86E+00	3.58E+00	4.41E+00	1.05E+01	7.47E+00	4.82E+00	1.24E+01	NA	NA	NA						
MW-39-102	Q2-2010	008	101.5	-21.5	5/4/2010	15:27	3.93E+02	2.01E+02	2.13E+02	4.13E-01	6.30E-01	3.97E-01	-2.40E+00	5.48E+00	5.72E+00	-5.16E-01	6.30E+00	6.91E+00	NA	NA	NA	3.16E+02	4.35E+00	ND	ND	NA	MW-39-102
MW-39-102	Q3-2010	009	101.5	-21.5	7/22/2010	14:53	2.30E+02	1.49E+02	1.43E+02	4.05E+00	9.93E-01	4.71E-01	-1.08E+00	6.35E+00	6.98E+00	-3.63E+00	5.55E+00	4.42E+00	NA	NA	NA						
MW-39-102	Q4-2010	010	101.5	-21.5	11/15/2010	16:12	3.6[illegible]E+02	1.83E+02	3.84E+02	1.40E+00	9.00E-01	1.93E+00	2.98E+00	3.38E+00	8.21E+00	-4.12E+00	3.52E+00	6.23E+00	NA	NA	NA						
MW-39-124	Q2-2010	008	124	-44	5/4/2010	12:32	3.03E+02	1.92E+02	2.05E+02	5.90E-01	8.[illegible]8E-01	3.96E-01	-2.76E-02	5.43E+00	5.45E+00	1.35E-02	5.05E+00	5.53E+00	NA	NA	NA	3.08E+02	2.25E+00	ND	ND	NA	MW-39-124
MW-39-124	Q3-2010	009	124	-44	7/22/2010	11:39	1.13E+02	1.34E+02	1.45E+02	2.25E+00	7.71E-01	5.01E-01	-1.11E+00	8.32E+00	9.28E+00	-4.[illegible]7E-01	9.75E+00	1.10E+01	NA	NA	NA						
MW-39-124	Q4-2010	010	124	-44	11/15/2010	12:46	3.73E+02	1.83E+02	3.85E+02	1.17E+00	8.35E-01	1.93E+00	-6.40E+00	6.71E+00	1.61E+01	-1.[illegible]1E-01	4.98E+00	1.10E+01	NA	NA	NA						
MW-39-183	Q2-2010	008	182.5	-102.5	5/4/2010	12:51	1.34E+02	1.89E+02	2.10E+02	8.20E-02	5.44E-01	5.90E-01	2.11E+00	6.53E+00	7.73E+00	-2.38E+00	7.59E+00	6.99E+00	NA	NA	NA	ND	ND	ND	ND	NA	MW-39-183
MW-39-183	Q3-2010	009	182.5	-102.5	7/22/2010	11:38	1.07E+02	1.12E+02	1.19E+02	2.08E-01	4.[illegible]9E-01	4.79E-01	-4.62E+00	8.88E+00	9.01E+00	-5.09E+00	9.62E+00	8.93E+00	NA	NA	NA						
MW-39-183	Q4-2010	010	182.5	-102.5	11/15/2010	12:53	8.02E+01	1.61E+02	3.83E+02	[illegible].19E-01	7.56E-01	1.77E+00	1.15E+00	4.83E+00	1.10E+01	3.53E+00	4.93E+00	1.10E+01	NA	NA	NA						
MW-39-195	Q2-2010	008	195	-115	5/4/2010	13:14	6.99E+01	1.64E+02	1.84E+02	6.21E-01	6.54E-01	5.82E-01	-1.56E+00	6.43E+00	6.86E+00	-1.59E-01	6.84E+00	7.63E+00	NA	NA	NA	ND	ND	ND	ND	NA	MW-39-195
MW-39-195	Q3-2010	009	195	-115	7/22/2010	12:10	9.26E+01	1.11E+02	1.20E+02	5.61E-01	5.70E-01	5.97E-01	7.36E-01	8.64E+00	9.43E+00	-9.78E-01	8.93E+00	9.62E+00	NA	NA	NA						
MW-39-195	Q4-2010	010	195	-115	11/15/2010	13:25	2.16E+02	1.86E+02	4.09E+02	[illegible].52E-01	7.35E-01	1.73E+00	-3.21E+00	4.09E+00	6.54E+00	8.70E+00	4.38E+00	1.20E+01	NA	NA	NA						
MW-40-27	Q1-2010	010	25.7	46.5	3/4/2010	14:40	1.30E+02	1.65E+02	1.83E+02	[illegible].10E-01	4.58E-01	5.59E-01	-1.62E+00	7.82E+00	6.98E+00	3.86E+00	6.71E+00	8.33E+00	NA	NA	NA	2.60E+02	ND	ND	ND	NA	MW-40-27
MW-40-27	Q2-2010	011	25.7	46.5	4/15/2010	16:00	1.43E+02	1.74E+02	1.93E+02	[illegible].05E-01	6.39E-01	7.95E-01	-1.30E+00	4.02E+00	4.36E+00	-2.93E+00	5.64E+00	4.85E+00	NA	NA	NA						
MW-40-27	Q3-2010	012	25.7	46.5	8/26/2010	14:42	1.93E+02	1.26E+02	1.24E+02	2.23E-01	6.54E-01	7.73E-01	1.95E+00	4.50E+00	5.46E+00	-1.03E+00	4.72E+00	5.12E+00	NA	NA	NA						
MW-40-27	Q4-2010	013	25.7	46.5	11/29/2010	15:23	2.06E+02	1.49E+02	1.44E+02	[illegible].10E-01	7.96E-01	9.63E-01	3.16E-01	3.36E+00	3.76E+00	1.0[illegible]E+00	3.63E+00	4.13E+00	NA	NA	NA						
MW-40-46	Q1-2010	011	45.2	27	3/4/2010	14:58	9.28E+01	1.62E+02	1.83E+02	6.20E-01	7.56E-01	7.95E-01	2.13E+00	4.57E+00	5.36E+00	1.37E+00	4.06E+00	5.85E+00	NA	NA	NA	1.90E+02	ND	ND	ND	NA	MW-40-46
MW-40-46	Q2-2010	012	45.2	27	4/15/2010	16:18	2.35E+02	1.38E+02	1.45E+02	3.98E-01	7.33E-01	3.15E-01	2.73E+00	3.30E+00	4.08E+00	1.19E+00	3.40E+00	3.95E+00	NA	NA	NA						
MW-40-46	Q3-2010	013	45.2	27	8/26/2010	14:56	1.24E+02	1.22E+02	1.29E+02	-1.83E-01	5.[illegible]1E-01	7.19E-01	7.02E-01	6.01E+00	6.90E+00	5.43E+00	6.17E+00	8.30E+00	NA	NA	NA						
MW-40-46	Q4-2010	014	45.2	27	11/29/2010	16:36	1.63E+02	1.47E+02	1.43E+02	6.60E-02	7.89E-01	9.38E-01	5.32E-01	3.82E+00	4.28E+00	2.06E+00	3.99E+00	4.74E+00	NA	NA	NA						
MW-40-81	Q1-2010	011	81.7	-7.5	3/4/2010	10:56	1.47E+02	1.65E+02	1.83E+02	3.99E-02	6.37E-01	3.18E-01	1.42E+00	4.00E+00	4.69E+00	-7.18E-03	4.86E+00	5.42E+00	NA	NA	NA	2.20E+02	ND	ND	ND	NA	MW-40-81
MW-40-81	Q2-2010	012	81.7	-7.5	4/15/2010	12:15	1.92E+02	1.37E+02	1.47E+02	4.25E-01	7.02E-01	7.79E-01	1.72E+00	4.20E+00	4.93E+00	1.03E-01	3.82E+00	4.35E+00	NA	NA	NA						
MW-40-81	Q3-2010	013	81.7	-7.5	8/26/2010	11:05	9.03E+01	1.14E+02	1.24E+02	2.45E-01	5.25E-01	5.06E-01	-3.95E+00	5.24E+00	4.96E+00	-2.64E+00	4.68E+00	4.20E+00	NA	NA	NA						
MW-40-81	Q4-2010	014	81.7	-7.5	11/29/2010	12:03	2.43E+02	1.58E+02	1.47E+02	[illegible].13E-02	6.45E-01	7.85E-01	9.67E-01	4.33E+00	4.79E+00	4.37E-01	4.83E+00	5.23E+00	NA	NA	NA						
MW-40-100	Q1-2010	013	100.2	-27	3/4/2010	11:10	1.47E+02	1.65E+02	1.82E+02	2.06E-01	7.33E-01	3.05E-01	-7.58E-01	4.26E+00	4.60E+00	-3.34E+00	4.75E+00	4.53E+00	NA	NA	NA	ND	ND	ND	ND	NA	MW-40-100
MW-40-100	Q2-2010	014	100.2	-27	4/15/2010	12:16	1.39E+02	1.33E+02	1.45E+02	-1.08E-01	5.37E-01	7.48E-01	-2.83E-01	3.54E+00	3.96E+00	-2.15E+00	5.12E+00	4.80E+00	NA	NA	NA						
MW-40-100	Q3-2010	015	100.2	-27	8/26/2010	11:09	1.24E+02	1.37E+02	1.45E+02	-2.33E-01	3.95E-01	5.21E-01	8.37E-01	6.15E+00	7.12E+00	6.51E-01	5.61E+00	6.53E+00	NA	NA	NA						
MW-40-100	Q4-2010	016	100.2	-27	11/29/2010	12:12	1.34E+02	1.40E+02	1.45E+02	3.12E-01	6.70E-01	3.39E-01	1.46E-01	4.05E+00	4.53E+00	3.11E-01	4.26E+00	4.81E+00	NA	NA	NA						
MW-40-127	Q1-2010	013	127.2	-54	3/4/2010	11:12	8.56E+01	1.62E+02	1.82E+02	4.26E-01	6.79E-01	7.49E-01	-4.37E+00	6.12E+00	5.32E+00	1.93E+00	4.21E+00	5.14E+00	NA	NA	NA	ND	ND	ND	ND	NA	MW-40-127
MW-40-127	Q2-2010	014	127.2	-54	4/15/2010	13:13	1.26E+02	1.34E+02	1.47E+02	-5.12E-03	3.50E-01	4.61E-01	-2.40E+00	9.29E+00	9.96E+00	2.33E+00	9.72E+00	1.13E+01	NA	NA	NA						
MW-40-127	Q3-2010	015	127.2	-54	8/26/2010	11:16	1.36E+02	1.40E+02	1.47E+02	2.23E-02	2.78E-01	3.67E-01	-5.02E+00	7.95E+00	8.28E+00	6.43E-01	6.48E+00	7.43E+00	NA	NA	NA						
MW-40-127	Q4-2010	016	127.2	-54	11/29/2010	12:26	1.22E+02	1.38E+02	1.45E+02	[illegible].34E-01	9.02E-01	3.73E-01	-1.53E-01	4.87E+00	5.43E+00	1.12E+00	4.38E+00	5.05E+00	NA	NA	NA						
MW-40-162	Q1-2010	011	161.7	-88.5	3/4/2010	11:57	2.20E+01	1.59E+02	1.82E+02	8.54E-02	5.94E-01	7.58E-01	4.31E-01	4.82E+00	5.46E+00	9.30E-01	4.44E+00	5.12E+00	NA	NA	NA	ND	ND	ND	ND	NA	MW-40-162
MW-40-162	Q2-2010	012	161.7	-88.5	4/15/2010	14:50	1.03E+02	1.32E+02	1.45E+02	9.77E-02	6.63E-01	3.18E-01	-2.73E+00	8.36E+00	8.61E+00	2.35E+00	8.63E+00	1.05E+01	NA	NA	NA						
MW-40-162	Q3-2010	013	161.7	-88.5	8/26/2010	12:29	1.02E+02	1.36E+02	1.43E+02	5.09E-01	7.33E-01	7.75E-01	7.14E-01	6.23E+00	7.06E+00	3.52E+00	6.78E+00	8.33E+00	NA	NA	NA						
MW-40-162	Q4-2010	014	161.7	-88.5	11/29/2010	12:45	6.40E+01	1.27E+02	1.45E+02	-5.51E-03	6.55E-01	7.94E-01	3.50E-01	4.34E+00	4.91E+00	3.43E-01	4.47E+00	5.03E+00	NA	NA	NA						
MW-41-40	Q1-2010	015	34.4	20.5	3/1/2010	17:28	9.35E+02	1.91E+02	1.63E+02	4.01E+00	8.98E-01	4.46E-01	-3.97E+00	8.45E+00	8.76E+00	1.07E+00	6.81E+00	6.59E+00	NA	NA	NA	1.65E+03	3.54E+00	ND	ND	NA	MW-41-40
MW-41-40	Q2-2010	016	34.4	20.5	4/19/2010	14:09	4.32E+02	1.79E+02	1.50E+02	2.09E+00	1.05E+00	3.40E-01	-2.56E+00	8.09E+00	8.29E+00	-6.83E-01	8.55E+00	9.32E+00	NA	NA	NA						
MW-41-40	Q3-2010	017	34.4	20.5	7/21/2010	13:4[illegible]	2.79E+03	3.02E+02	1.47E+02	4.37E+00	1.02E+00	5.33E-01	1.59E+00	5.82E+00	7.07E+00	-6.50E-01	7.18E+00	7.61E+00	NA	NA	NA						
MW-41-40	Q4-2010	018	34.4	20.5	10/25/2010	16:06	2.43E+03	2.78E+02	1.17E+02	4.08E+00	1.16E+00	5.72E-01	3.32E+00	5.63E+00	6.87E+00	-1.99E+00	6.74E+00	6.95E+00	NA	NA	NA						
MW-41-63	Q1-2010	014	52.5	-4.5	3/1/2010	16:08	2.43E+02	1.59E+02	1.63E+02	2.01E+00	6.78E-01	4.19E-01	3.10E+00	4.84E+00	5.86E+00	-1.07E+00	5.37E+00	5.79E+00	NA	NA	NA	4.27E+02	3.58E+00	ND	ND	NA	MW-41-63
MW-41-63	Q2-2010	015	52.5	-4.5	4/19/2010	14:03	4.30E+02	1.77E+02	1.49E+02	[illegible].66E+00	1.[illegible]2E+00	7.70E-01	-4.51E+00	1.22E+01	1.52E+01	-7.27E-02	6.99E+00	7.75E+00	NA	NA	NA						
MW-41-63	Q3-2010	016	52.5	-4.5	7/21/2010	13:4[illegible]	5.13E+02	1.68E+02	1.43E+02	4.79E+00	1.09E+00	5.23E-01	2.71E+00	8.29E+00	8.77E+00	1.6[illegible]E+00	7.93E+00	9.52E+00	NA	NA	NA						
MW-41-63	Q4-2010	017	52.5	-4.5	10/25/2010	12:59	5.06E+02	1.50E+02	1.14E+02	4.25E+00	1.19E+00	7.17E-01	1.06E+00	6.08E+00	7.07E+00	2.87E+00	5.85E+00	7.23E+00	NA	NA	NA						
MW-42-49	Q1-2010	020	42.6	27.1	2/16/2010	16:49	9.79E+02	1.76E+02	1.53E+02	1.24E+02	5.92E+00	7.03E-01	6.52E-04	7.07E+03	3.33E+01	-9.83E-01	6.81E+00	6.79E+00	7.10E+02	4.05E+01	2.18E+01	1.31E+03	4.50E-01	3.29E+04	ND	3.37E+02	MW-42-49
MW-42-49	Q2-2010	021	42.6	27.1	4/16/2010	12:59	1.30E+03	4.25E+02	3.71E+02	2.40E+01	2.11E+00	3.23E-01	2.37E-04	2.85E+03	2.92E+01	8.37E-01	1.06E+01	1.23E+01	2.36E+02	2.88E+01	2.07E+01						
MW-42-49	Q3-2010	022	42.6	27.1	7/30/2010	11:38	1.69E+03	2.34E+02	1.24E+02	1.39E+01	1.53E+00	3.90E-01	1.37E-04	2.46E+03	2.50E+01	7.33E-01	6.64E+00	7.77E+00	1.77E+02	2.97E+01	2.18E+01						
MW-42-49	Q4-2010	023	42.6	27.1	10/27/2010	12:23	1.23E+03	2.03E+02	1.64E+02	1.81E+01	2.11E+00	3.72E-01	2.39E-04	2.94E+03	2.93E+01	-1.67E+00	9.77E+00	1.03E+01	2.24E+02	2.66E+01	2.10E+01						
MW-42-78	Q1-2010	015	74	-4.3	2/16/2010	16:19	3.57E+02	1.49E+02	1.52E+02	-1.14E-01	4.37E-01	5.80E-01	3.32E+00	5.46E+00	6.70E+00	-1.84E-01	4.93E+00	5.52E+00	-9.55E+00	1.76E+01	2.08E+01	4.99E+02	ND	ND	ND	ND	MW-42-78
MW-42-78	Q2-2010	016	74	-4.3	4/16/2010	13:29	3.93E+02	2.91E+02	3.10E+02	[illegible].81E-01	7.86E-01	9.23E-01	2.22E+00	8.07E+00	1.03E+01	-6.97E+00	9.24E+00	7.54E+00	-6.55E+00	1.76E+01	2.08E+01						
MW-42-78	Q3-2010	017	74	-4.3	7/30/2010	12:23	6.3[illegible]E+02	1.71E+02	1.31E+02	2.78E-02	3.03E-01	3.85E-01	-1.17E-01	7.56E+00	8.30E+00	-7.43E-01	7.04E+00	7.42E+00	1.96E+00	1.31E+01	1.52E+01						
MW-42-78	Q4-2010	018	74	-4.3	10/27/2010	13:56	6.13E+02	1.74E+02	1.64E+02	-1.14E-01	4.79E-01	5.87E-01	-1.09E+00	8.69E+00	9.51E+00	-5.11E+00	8.41E+00	7.24E+00	-4.24E+00	1.80E+01	2.09E+01						
MW-43-28	Q1-2010	014	23.5	25.3	3/2/2010	17:30	2.13E+02	1.56E+02	1.63E+02	1.48E-01	3.31E-01	4.50E-01	-9.17E-01	5.10E+00	5.60E+00	2.29E+00	5.80E+00	6.91E+00	NA	NA	NA	2.11E+02	ND	ND	ND	NA	MW-43-28
MW-43-28	Q2-2010	015	23.5	25.3	4/19/2010	13:38	2.25E+02	1.39E+02	1.47E+02	-7.48E-03	5.52E-01	7.63E-01	-2.66E-01	5.61E+00	6.36E+00	-1.50E-01	5.61E+00	6.33E+00	NA	NA	NA						
MW-43-28	Q3-2010	016	23.5	25.3	7/20/2010	13:48	9.1[illegible]E+01	1.33E+02	1.47E+02	-5.43E-03	3.80E-01	5.33E-01	5.30E+00	7.52E+00	9.76E+00	-1.44E+00	9.49E+00	1.01E+01	NA	NA	NA						
MW-43-28	Q4-2010	017	23.5	25.3	10/25/2010	11:29	1.95E+02	1.17E+02	1.13E+02	-1.98E-01	5.01E-01	5.94E-01	3.36E+00	5.00E+00	6.09E+00	-5.01E-01	5.43E+00	5.84E+00	NA	NA	NA						
MW-43-62	Q1-2010	014	51	-2.2	3/2/2010	14:46	1.3[illegible]E+02	1.52E+02	1.68E+02	3.51E-01	3.93E-01	4.05E-01	1.54E+00	4.61E+00	5.43E+00	1.35E+00	4.75E+00	5.61E+00	NA	NA	NA	2.16E+02	ND	ND	ND	NA	MW-43-62
MW-43-62	Q2-2010	015	51	-2.2	4/19/2010	13:17	2.16E+02	1.39E+02	1.47E+02	6.35E-01	7.[illegible]0E-01	7.15E-01	1.08E+00	4.44E+00	4.90E+00	1.30E+00	4.68E+00	5.52E+00	NA	NA	NA						
MW-43-62	Q3-2010	016	51	-2.2	7/20/2010	15:07	5.97E+01	1.33E+02	1.51E+02	4.41E-01	4.75E-01	4.94E-01	-1.11E+00	7.96E+00	8.85E+00	-2.43E+00	8.22E+00	8.59E+00	NA	NA	NA						
MW-43-62	Q4-2010	017	51	-2.2	10/25/2010	11:06	9.76E+01	1.05E+02	1.12E+02	3.69E-01	7.[illegible]0E-01	3.03E-01	5.94E-01	6.27E+00	6.81E+00	-6.69E-01	5.37E+00	5.81E+00	NA	NA	NA						
MW-44-66	Q1-2010	015	62.4	31.1	2/23/2010	16:08	4.37E+02	1.70E+02	1.73E+02	4.84E-02	3.80E-01	3.79E-01	2.33E+00	4.32E+00	5.12E+00	-7.78E-01	4.49E+00	4.87E+00	NA	NA	NA	3.49E+02	ND	ND	ND	NA	MW-44-66
MW-44-66	Q2-2010 Mid	016	62.4	31.1	6/10/2010	15:30	4.75E+02	1.89E+02	1.92E+02	2.16E-01	6.[illegible]7E-01	7.93E-01	-1.54E+00	5.91E+00	6.37E+00	-1.91E+00	6.06E+00	6.25E+00	NA	NA	NA						
MW-44-66	Q3-2010	017	62.4	31.1	7/22/2010	15:47	1.75E+02	1.41E+02	1.47E+02	2.76E-01	5.63E-01	5.43E-01	-3.76E+00	6.86E+00	6.84E+00	1.20E+00	8.52E+00	9.73E+00	NA	NA	NA						
MW-44-66	Q4-2010	018	62.4	31.1	10/26/2010	14:46	3.10E+02	1.29E+02	1.11E+02	-1.07E-01	4.30E-01	5.95E-01	4.23E-01	6.24E+00	7.11E+00	-3.73E+00	7.37E+00	7.27E+00	NA	NA	NA						
MW-44-102	Q1-2010	016	80	13.5	2/17/2010	16:39	5.12E+02	1.71E+02	1.69E+02	2.24E-01	3.57E-01	3.93E-01	-3.93E+00	6.07E+00	5.43E+00	1.47E+00	3.56E+00	4.34E+00	NA	NA	NA	4.52E+02	ND	ND	ND	NA	MW-44-102
MW-44-102	Q2-2010 Mid	017	80	13.5	6/10/2010	13:13	4.94E+02	1.79E+02	1.83E+02	-1.79E-01	5.[illegible]3E-01	5.74E-01	-2.41E+00	7.86E+00	8.11E+00	-5.22E+00	7.37E+00	6.85E+00	NA	NA	NA						
MW-44-102	Q3-2010	018	80	13.5	7/21/2010	13:20	2.76E+02	1.49E+02	1.45E+02	4.11E-01	4.70E-01	4.80E-01	2.38E+00	1.02E+01	1.18E+01	-1.83E+00	8.85E+00	9.25E+00	NA	NA	NA						
MW-44-102	Q4-2010	019	80	13.5	10/26/2010	13:32	4.47E+02	1.42E+02	1.12E+02	2.42E-01	5.47E-01	5.33E-01	-2.73E+00	5.49E+00	5.54E+00	6.85E-01	5.38E+00	6.11E+00	NA	NA	NA						
MW-45-42	Q1-2010	019	37	16.6	2/17/2010	15:55	3.86E+03	2.88E+02	1.63E+02	6.43E-01	5.02E-01	4.78E-01	2.13E+00	4.25E+00	5.10E+00	-9.48E-01	4.35E+00	4.74E+00	NA	NA	NA	3.08E+03	6.43E-01	ND	ND	NA	MW-45-42
MW-45-42	Q2-2010	020	37	16.5	4/20/2010	16:13	2.03E+03	3.05E+02	1.51E+02	[illegible].96E-01	6.37E-01	7.22E-01	2.34E+00	6.79E+00	7.62E+00	-7.47E+00	8.46E+00	5.97E+00	NA	NA	NA						
MW-45-42	Q3-2010	021	37	16.5	7/19/2010	15:38	3.69E+03	3.35E+02	1.43E+02	5.08E-01	6.[illegible]0E-01	5.47E-01	1.04E+00	7.75E+00	8.85E+00	-1.87E+00	7.10E+00	7.11E+00	NA	NA	NA						
MW-45-42	Q4-2010	022	37	16.5	10/22/2010	15:59	2.74E+03	2.90E+02	1.13E+02	9.55E-02	5.[illegible]9E-01	5.32E-01	1.35E+00	6.04E+00	6.99E+00	-1.65E+00	5.70E+00	5.89E+00	NA	NA	NA						
MW-45-61	Q1-2010	019	58	-4.4	2/17/2010	12:55	1.44E+03	2.10E+02	1.63E+02	3.08E-01	3.30E-01	3.95E-01	8.12E-01	3.86E+00	4.17E+00	2.61E+00	4.37E+00	4.43E+00	NA	NA	NA	1.23E+03	ND	ND	ND	NA	MW-45-61
MW-45-61	Q2-2010	020	58	-4.4	4/20/2010	11:13	9.89E+02	2.25E+02	1.45E+02	2.71E-01	7.70E-01	3.89E-01	-8.78E-02	7.91E+00	8.84E+00	-3.82E+00	8.70E+00	8.72E+00	NA	NA	NA						
MW-45-61	Q3-2010	021	58	-4.4	7/19/2010	13:28	1.00E+03	2.07E+02	1.43E+02	4.07E-01	5.04E-01	5.30E-01	-2.93E+00	8.29E+00	8.61E+00	-2.24E+00	8.88E+00	9.24E+00	NA	NA	NA						
MW-45-61	Q4-2010	022	58	-4.4	10/22/2010	11:54	1.5[illegible]E+03	2.22E+02	1.12E+02	3.58E-01	5.53E-01	5.05E-01	-2.92E+00	5.78E+00	5.94E+00	1.13E-01	6.92E+00	7.73E+00	NA	NA	NA						

J:\17,000-18,999\17869\17869-52.MG\Q4-2010\FINAL\Tables\
Table 3 - Fourth Quarter 2010 Groundwater Analytical Results and Averages.xlsx,
Q4 2010 TABLE 3

See Page 5 for Notes

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TABLE 3
FOURTH QUARTER 2010 GROUNDWATER ANALYTICAL RESULTS AND AVERAGES
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLING QUARTER[2]	SAMPLE ID	SAMPLE ZONE CENTER, Depth Ft Below Top of Casing[2]	SAMPLE ZONE CENTER, Elevation Ft msl[3]	SAMPLE COLLECTION Date	SAMPLE COLLECTION Time	TRITIUM (pCi/L) Result	TRITIUM (pCi/L) Std. Dev.[10]	TRITIUM (pCi/L) MDC	Sr-90 (pCi/L) Result	Sr-90 (pCi/L) Std. Dev.[10]	Sr-90 (pCi/L) MDC	Cs-137 (pCi/L) Result	Cs-137 (pCi/L) Std. Dev.[10]	Cs-137 (pCi/L) MDC	Co-60 (pCi/L) Result	Co-60 (pCi/L) Std. Dev.[10]	Co-60 (pCi/L) MDC	Ni-63 (pCi/L) Result	Ni-63 (pCi/L) Std. Dev.[10]	Ni-63 (pCi/L) MDC	YEARLY ROLLING AVERAGES[4] TRITIUM (pCi/L) Average	Sr-90 (pCi/L) Average	Cs-137 (pCi/L) Average	Co-60 (pCi/L) Average	Ni-63 (pCi/L) Average	Well ID[1]
MW-46	Q1-2010	319	11.5	7.6	2/12/2010	12:44	1.13E+03	2.13E+02	1.83E+03	5.09E-01	5.69E-01	5.98E-01	1.41E+00	3.98E+00	4.64E+00	-1.64E+00	5.68E+00	4.98E+00	NA	NA	NA	1.74E+03	8.57E-01	ND	ND	NA	MW-46
MW-46	Q2-2010	320	11.5	7.6	4/12/2010	11:32	7.62E+02	1.92E+02	1.77E+02	8.57E-01	7.68E-01	7.39E-01	-2.73E+00	1.08E+01	1.14E+01	-2.57E+00	1.05E+01	1.13E+01	NA	NA	NA						
MW-46	Q3-2010	321	11.5	7.6	7/23/2010	13:10	1.92E+03	2.58E+02	1.45E+02	.80E-01	5.63E-01	5.59E-01	1.28E-01	7.65E+00	8.12E+00	-1.35E+00	7.96E+00	8.34E+00	NA	NA	NA						
MW-46	Q4-2010	322	11.5	7.6	10/28/2010	13:25	3.13E+03	3.08E+02	1.13E+02	3.76E-01	5.09E-01	5.49E-01	-2.05E+00	5.82E+00	5.88E+00	2.96E+00	6.81E+00	8.22E+00	NA	NA	NA						
MW-49-26	Q1-2010	319	12.1	-4.4	2/22/2010	14:35	2.82E+03	2.70E+02	1.74E+02	1.36E+00	1.52E+00	3.62E-01	2.49E+00	5.72E+00	6.86E+00	-1.51E-01	5.78E+00	6.41E+00	-6.01E+01	1.84E+01	2.16E+01	2.86E+03	1.40E-01	ND	ND	ND	MW-49-26
MW-49-26	Q2-2010	320	12.1	-4.4	4/23/2010	14:42	3.00E+03	3.30E+02	1.33E+02	1.55E+00	2.44E+00	3.19E-01	2.32E+00	7.32E+00	8.92E+00	-2.28E-01	9.12E+00	1.01E+01	-7.28E+00	1.55E+01	2.26E+01						
MW-49-26	Q3-2010	321	12.1	-4.4	8/11/2010	11:27	3.03E+03	3.03E+02	1.27E+02	1.28E+00	1.44E+00	3.66E-01	-7.91E-01	1.14E+01	1.15E+01	-1.85E+00	1.10E+01	1.12E+01	3.27E-01	1.64E+01	1.92E+01						
MW-49-26	Q4-2010	322	12.1	-4.4	11/11/2010	14:23	2.59E+03	3.00E+02	4.73E+02	-3.42E-01	9.56E-01	2.34E+00	4.52E+00	4.84E+00	1.15E+01	1.18E+00	3.96E+00	9.11E+00	-.79E+00	1.02E+01	2.29E+01						
MW-49-42	Q1-2010	319	33.1	-23.4	2/22/2010	14:43	2.20E+03	2.49E+02	1.75E+02	1.85E+00	2.42E+00	7.57E-01	-2.91E-01	5.17E+00	5.65E+00	1.19E+00	5.75E+00	6.62E+00	.667E-01	1.95E+01	2.25E+01	2.41E+03	1.36E-01	ND	ND	ND	MW-49-42
MW-49-42	Q2-2010	320	33.1	-23.4	4/23/2010	14:39	2.76E+03	3.26E+02	1.43E+02	1.75E+00	2.28E+00	7.01E-01	-5.63E+00	6.62E+00	6.01E+00	-1.63E+00	7.58E+00	7.64E+00	-3.23E+00	2.18E+01	2.51E+01						
MW-49-42	Q3-2010	321	33.1	-23.4	8/11/2010	11:00	2.27E+03	2.72E+02	1.33E+02	1.85E+00	1.67E+00	3.91E-01	4.30E+00	7.88E+00	9.85E+00	-2.34E+00	8.76E+00	9.05E+00	-.91E+00	1.65E+01	1.96E+01						
MW-49-42	Q4-2010	322	33.1	-23.4	11/11/2010	14:13	2.39E+03	2.73E+02	4.02E+02	1.99E+00	1.65E+00	.12E+00	8.48E-01	6.75E+00	9.79E+00	3.75E+00	5.42E+00	1.33E+01	4.00E+00	8.14E+00	1.80E+01						
MW-49-65	Q1-2010	319	60	-45.4	2/22/2010	13:57	1.42E+03	2.19E+02	1.74E+02	1.55E+00	2.14E+00	7.71E-01	-6.73E-01	5.14E+00	5.79E+00	1.50E+00	4.53E+00	5.47E+00	-6.53E+00	1.81E+01	2.13E+01	1.42E+03	1.31E-01	ND	ND	ND	MW-49-65
MW-49-65	Q2-2010	320	60	-45.4	4/23/2010	15:17	1.55E+03	2.63E+02	1.53E+02	1.04E+00	1.85E+00	5.37E-01	6.11E+00	1.36E+01	9.18E+00	-2.53E-01	1.17E+01	1.35E+01	-.29E+01	1.56E+01	2.32E+01						
MW-49-65	Q3-2010	321	60	-45.4	8/11/2010	11:19	1.32E+03	2.16E+02	1.23E+02	1.24E+00	1.44E+00	4.49E-01	-1.12E+01	1.22E+01	1.43E+01	-2.58E-01	9.88E+00	1.11E+01	-5.74E-01	1.80E+01	2.13E+01						
MW-49-65	Q4-2010	322	60	-45.4	11/11/2010	14:18	1.37E+03	2.34E+02	3.97E+02	1.41E+00	1.75E+00	.34E+00	6.29E+00	6.88E+00	1.07E+01	3.33E-01	5.37E+00	1.18E+01	3.41E+00	9.31E+00	2.09E+01						
MW-50-42	Q1-2010	320	42	-27.1	2/19/2010	12:53	3.73E+02	1.71E+02	1.74E+02	5.56E+00	1.42E+00	3.15E-01	2.71E+00	5.42E+00	6.46E+00	3.03E+00	6.13E+00	7.39E+00	-.37E+01	1.88E+01	2.23E+01	6.90E+02	5.52E+00	ND	ND	ND	MW-50-42
MW-50-42	Q2-2010	321	42	-27.1	4/30/2010	12:34	1.36E+03	2.46E+02	1.63E+02	4.36E+00	1.13E+00	3.88E-01	8.49E-01	7.56E+00	8.38E+00	-1.97E+00	5.09E+00	5.04E+00	-.48E+01	2.25E+01	2.61E+01						
MW-50-42	Q3-2010	322	42	-27.1	8/4/2010	13:1.	1.6.E+02	1.25E+02	1.23E+02	8.43E+00	1.42E+00	5.63E-01	-1.94E+00	8.65E+00	9.25E+00	1.30E-01	8.05E+00	9.05E+00	0.00E+00	1.59E+01	1.88E+01						
MW-50-42	Q4-2010	323	42	-27.1	11/12/2010	12:10	8.67E+02	1.83E+02	1.22E+02	7.73E+00	1.11E+00	3.89E-01	2.40E+00	5.71E+00	6.76E+00	2.73E+00	5.58E+00	6.94E+00	-7.36E+01	1.79E+01	2.15E+01						
MW-50-66	Q1-2010	325	60	-45.1	2/19/2010	15:5.	2.84E+03	2.72E+02	1.74E+02	2.50E+00	3.04E+00	3.16E-01	-6.04E-01	4.68E+00	5.20E+00	-1.03E+00	5.01E+00	5.41E+00	-3.76E+01	1.91E+01	2.21E+01	3.21E+03	2.52E-01	ND	ND	ND	MW-50-66
MW-50-66	Q2-2010	326	60	-45.1	4/30/2010	14:25	2.76E+03	3.21E+02	1.63E+02	2.99E+00	3.01E+00	3.81E-01	-1.86E+00	5.84E+00	6.18E+00	3.85E-01	5.38E+00	6.13E+00	-.14E+01	2.19E+01	2.52E+01						
MW-50-66	Q3-2010	327	60	-45.1	8/4/2010	16:36	3.5.E+03	3.33E+02	1.34E+02	2.65E+00	2.28E+00	4.80E-01	3.52E+00	8.29E+00	9.99E+00	9.22E-01	9.18E+00	1.05E+01	2.07E+00	1.50E+01	1.81E+01						
MW-50-66	Q4-2010	328	60	-45.1	11/12/2010	12:30	3.72E+03	3.30E+02	1.21E+02	2.33E+00	2.71E+00	3.50E-01	-1.39E+00	6.21E+00	6.79E+00	-1.67E+00	6.95E+00	7.31E+00	3.25E-01	1.88E+01	2.18E+01						
MW-51-40	Q1-2010	314	33.7	28	2/5/2010	14:3.	7.54E+01	1.74E+02	1.93E+02	-5.43E-03	6.58E-01	3.64E-01	1.75E+00	4.09E+00	4.72E+00	-2.91E+00	5.31E+00	4.42E+00	NA	NA	NA	1.59E+02	ND	ND	ND	NA	MW-51-40
MW-51-40	Q2-2010	315	33.7	28	4/8/2010	13:58	9.55E+01	1.32E+02	1.44E+02	-1.04E-0.	7.30E-01	3.98E-01	8.94E-01	8.25E+00	9.56E+00	-1.94E+00	9.18E+00	9.55E+00	NA	NA	NA						
MW-51-40	Q3-2010	316	33.7	28	8/25/2010	16:29	1.70E+02	1.07E+02	1.03E+02	-4.31E-03	3.1E-01	4.19E-01	-2.48E+00	6.17E+00	6.53E+00	1.46E+00	5.21E+00	6.37E+00	NA	NA	NA						
MW-51-40	Q4-2010	317	33.7	28	11/30/2010	12:54	1.43E+02	1.41E+02	1.44E+02	.467E-01	6.05E-01	7.12E-01	1.54E+00	4.28E+00	4.95E+00	1.72E+00	4.17E+00	4.95E+00	NA	NA	NA						
MW-51-79	Q1-2010	314	73.7	-1.	2/5/2010	14:40	1.37E+02	1.80E+02	1.93E+02	-1.36E-02	6.10E-01	3.44E-01	3.51E-02	3.39E+00	3.74E+00	7.57E-01	3.57E+00	4.08E+00	NA	NA	NA	1.10E+02	ND	ND	ND	NA	MW-51-79
MW-51-79	Q2-2010	315	73.7	-1.	4/8/2010	14:2.	6.44E+01	1.33E+02	1.51E+02	4.88E-01	8.07E-01	9.02E-01	4.35E+00	8.89E+00	1.11E+01	4.53E+00	1.00E+01	1.28E+01	NA	NA	NA						
MW-51-79	Q3-2010	316	73.7	-1.	8/25/2010	16:47	1.10E+02	9.84E+01	1.01E+02	5.81E-01	8.23E-01	3.92E-01	5.29E+00	6.13E+00	7.76E+00	1.53E+00	6.71E+00	7.83E+00	NA	NA	NA						
MW-51-79	Q4-2010	317	73.7	-1.	11/30/2010	13:08	3.1.E+01	1.21E+02	1.44E+02	-1.22E-0.	4.32E-01	5.24E-01	-8.30E-01	4.12E+00	4.54E+00	9.93E-01	4.02E+00	4.65E+00	NA	NA	NA						
MW-51-104	Q1-2010	312	103.7	-30	2/5/2010	11:44	-1.95E+01	1.70E+02	1.93E+02	3.73E-03	6.38E-01	3.24E-01	3.36E-03	7.12E+00	6.23E+00	1.95E+00	5.38E+00	6.43E+00	NA	NA	NA	ND	ND	ND	ND	NA	MW-51-104
MW-51-104	Q2-2010	313	103.7	-30	4/8/2010	10:42	1.10E+02	1.34E+02	1.45E+02	.26E-01	7.62E-01	3.99E-01	-5.36E-01	8.43E+00	9.34E+00	2.15E+00	7.96E+00	9.79E+00	NA	NA	NA						
MW-51-104	Q3-2010	314	103.7	-30	8/25/2010	13:18	1.33E+02	1.37E+02	1.44E+02	.62E-01	8.5E-01	3.20E-01	8.70E-01	5.75E+00	6.63E+00	-2.70E-01	4.96E+00	5.47E+00	NA	NA	NA						
MW-51-104	Q4-2010	315	103.7	-30	11/30/2010	9:55	8.54E+01	1.33E+02	1.47E+02	3.74E-01	7.8E-01	3.12E-01	-1.43E-01	3.99E+00	4.55E+00	2.13E-01	4.56E+00	5.05E+00	NA	NA	NA						
MW-51-135	Q1-2010	312	135.2	-67.5	2/5/2010	11:48	4.89E+00	1.71E+02	1.93E+02	2.14E-02	6.50E-01	3.21E-01	-1.07E-02	3.90E+00	4.35E+00	-4.54E-02	4.51E+00	5.13E+00	NA	NA	NA	ND	ND	ND	ND	NA	MW-51-135
MW-51-135	Q2-2010	313	135.2	-67.5	4/8/2010	11:06	5.86E+01	1.31E+02	1.53E+02	-2.09E-03	5.99E-01	7.85E-01	-7.04E-03	8.73E+00	9.88E+00	-4.95E-01	1.04E+01	1.13E+01	NA	NA	NA						
MW-51-135	Q3-2010	314	135.2	-67.5	8/25/2010	13:2.	1.36E+02	1.41E+02	1.47E+02	-2.33E-0.	4.44E-01	5.70E-01	-6.64E-01	6.15E+00	6.80E+00	1.74E+00	6.62E+00	7.77E+00	NA	NA	NA						
MW-51-135	Q4-2010	315	135.2	-67.5	11/30/2010	9:57	9.53E+01	1.33E+02	1.45E+02	4.21E-01	7.3E-01	7.98E-01	-5.11E-01	4.18E+00	4.61E+00	-2.98E-01	4.20E+00	4.58E+00	NA	NA	NA						
MW-51-163	Q1-2010	312	162.7	-95	2/5/2010	11:46	6.10E+01	1.74E+02	1.93E+02	-1.82E-01	5.76E-01	3.21E-01	-8.29E-01	8.12E+00	7.94E+00	-1.95E+00	6.88E+00	6.07E+00	NA	NA	NA	ND	ND	ND	ND	NA	MW-51-163
MW-51-163	Q2-2010	313	162.7	-95	4/8/2010	11:3.	5.35E+01	1.27E+02	1.45E+02	-7.65E-03	6.06E-01	3.13E-01	-2.95E+00	8.55E+00	8.74E+00	-1.53E+00	1.04E+01	1.13E+01	NA	NA	NA						
MW-51-163	Q3-2010	314	162.7	-95	8/25/2010	13:5	8.26E+01	9.75E+01	1.05E+02	-1.08E-0.	3.98E-01	5.31E-01	3.21E+00	6.72E+00	8.11E+00	8.67E-01	6.32E+00	7.25E+00	NA	NA	NA						
MW-51-163	Q4-2010	315	162.7	-95	11/30/2010	10:02	9.0.E+01	1.31E+02	1.44E+02	-3.11E-0.	6.98E-01	3.94E-01	1.23E+00	8.07E+00	4.14E+00	3.30E-01	3.94E+00	4.43E+00	NA	NA	NA						
MW-51-189	Q1-2010	312	189.2	-121.5	2/5/2010	11:39	3.42E+01	1.73E+02	1.93E+02	3.21E-01	6.03E-01	5.83E-01	1.25E+00	5.70E+00	6.64E+00	-2.35E+00	6.75E+00	6.51E+00	NA	NA	NA	ND	ND	ND	ND	NA	MW-51-189
MW-51-189	Q2-2010	313	189.2	-121.5	4/8/2010	11:16	5.35E+01	1.27E+02	1.45E+02	3.25E-01	7.35E-01	3.47E-01	2.07E+00	8.15E+00	8.51E+00	3.45E-01	7.39E+00	8.22E+00	NA	NA	NA						
MW-51-189	Q3-2010	314	189.2	-121.5	8/25/2010	13:13	5.86E+01	9.38E+01	1.04E+02	4.40E-02	5.97E-01	7.65E-01	2.37E+00	5.64E+00	6.69E+00	-8.01E-01	5.85E+00	6.25E+00	NA	NA	NA						
MW-51-189	Q4-2010	315	189.2	-121.5	11/30/2010	9:56	6.9.E+01	1.29E+02	1.45E+02	.93E-01	7.99E-01	3.81E-01	-7.45E-01	4.51E+00	4.98E+00	-3.16E-01	4.61E+00	5.05E+00	NA	NA	NA						
MW-52-11	Q2-2010	305	.0	6.6	5/5/2010	12:26	3.73E+02	1.74E+02	1.83E+02	.89E-01	4.7E-01	5.62E-01	2.14E+00	5.99E+00	6.97E+00	-2.04E+00	5.91E+00	6.03E+00	NA	NA	NA	3.73E+02	ND	ND	ND	NA	MW-52-11
MW-53-18	Q2-2010	305	17.5	3.5	5/5/2010	16:16	3.0.E+03	1.71E+02	1.83E+02	8.08E-02	4.20E-01	5.26E-01	1.40E+00	5.61E+00	6.11E+00	9.40E-01	5.42E+00	6.23E+00	NA	NA	NA	3.01E+03	ND	ND	ND	NA	MW-53-18
MW-52-48	Q2-2010	305	48	-33.1	5/5/2010	16:43	1.60E+02	1.65E+02	1.82E+02	6.40E-01	6.58E-01	5.90E-01	-6.17E-01	6.04E+00	6.70E+00	-1.90E-01	5.13E+00	5.67E+00	NA	NA	NA	ND	ND	ND	ND	NA	MW-52-48
MW-52-64	Q2-2010	305	64	-49.1	5/5/2010	12:53	7.62E+01	1.61E+02	1.81E+02	-2.23E-01	7.02E-01	3.13E-01	-1.12E+00	5.21E+00	4.96E+00	1.49E+00	4.05E+00	4.93E+00	NA	NA	NA	ND	ND	ND	ND	NA	MW-52-64
MW-52-122	Q2-2010	305	122	-107.1	5/5/2010	14:57	6.46E+01	1.64E+02	1.84E+02	.59E-01	4.66E-01	5.60E-01	3.34E-02	5.33E+00	6.01E+00	-3.25E+00	6.25E+00	6.14E+00	NA	NA	NA	ND	ND	ND	ND	NA	MW-52-122
MW-52-162	Q2-2010	305	161.5	-146.6	5/5/2010	12:38	2.60E+02	1.70E+02	1.83E+02	-7.86E-02	4.15E-01	5.66E-01	-1.54E+00	5.52E+00	5.96E+00	3.03E+00	5.68E+00	7.13E+00	NA	NA	NA	2.60E+02	ND	ND	ND	NA	MW-52-162
MW-52-181	Q2-2010	305	181	-166.1	5/5/2010	12:47	2.18E+02	1.70E+02	1.84E+02	2.80E-01	4.29E-01	4.67E-01	-2.64E-01	5.64E+00	6.37E+00	-2.33E+00	6.40E+00	6.61E+00	NA	NA	NA	2.18E+02	ND	ND	ND	NA	MW-52-181
MW-53-82	Q1-2010	314	75	-4.7	2/16/2010	12:04	7.14E+03	3.41E+02	1.53E+02	2.23E+00	9.77E-01	7.74E-01	0.00E+00	5.42E+00	7.23E+00	-9.98E-01	4.75E+00	4.91E+00	-.24E+01	1.76E+01	2.09E+01	4.17E+03	2.23E+00	ND	ND	ND	MW-53-82
MW-53-82	Q2-2010	315	75	-4.7	4/15/2010	15:14	4.7.E+03	6.50E+02	3.93E+02	4.06E-01	7.37E-01	5.29E-01	4.40E+00	1.27E+01	1.51E+01	-4.95E+00	1.13E+01	1.13E+01	1.39E+00	1.89E+01	2.19E+01						
MW-53-82	Q3-2010	316	75	-4.7	7/30/2010	12:3.	2.25E+03	2.66E+02	1.27E+02	3.34E-01	3.83E-01	4.00E-01	-3.03E+00	8.36E+00	8.46E+00	-1.91E+00	8.00E+00	8.03E+00	-.45E+01	1.77E+01	2.23E+01						
MW-53-82	Q4-2010	317	75	-4.7	10/27/2010	12:07	2.59E+03	2.79E+02	1.10E+02	8.07E-01	7.90E-01	3.26E-01	-3.74E-02	5.82E+00	6.57E+00	1.14E-01	6.23E+00	7.03E+00	NA	NA	NA						
MW-53-120	Q1-2010	318	109.8	-39.5	2/16/2010	11:5.	4.66E+03	2.87E+02	1.53E+02	1.94E+00	3.39E+00	7.41E-01	-4.00E-01	5.82E+00	6.54E+00	-3.30E-01	6.23E+00	6.93E+00	6.73E+00	1.91E+01	2.16E+01	4.12E+03	3.30E-01	ND	ND	ND	MW-53-120
MW-53-120	Q2-2010	319	109.8	-39.5	4/15/2010	14:36	4.10E+03	6.14E+02	3.85E+02	1.32E+00	2.69E+00	3.06E-01	-6.92E+00	8.72E+00	8.19E+00	2.24E-01	8.74E+00	9.97E+00	7.53E+00	1.56E+01	2.22E+01						
MW-53-120	Q3-2010	320	109.8	-39.5	7/30/2010	14:36	3.8.E+03	3.38E+02	1.23E+02	2.97E+00	2.22E+00	4.77E-01	2.09E+00	1.27E+01	1.37E+01	-4.76E-01	8.04E+00	8.95E+00	3.59E+00	1.91E+01	2.21E+01						
MW-53-120	Q4-2010	321	109.8	-39.5	10/27/2010	12:48	3.9.E+03	3.38E+02	1.11E+02	2.96E+00	2.91E+00	7.02E-01	2.32E+00	5.07E+00	6.00E+00	-9.52E-01	5.46E+00	5.75E+00	NA	NA	NA						
MW-54-37	Q1-2010	312	35.5	-23.4	2/11/2010	11:16	1.3.E+03	1.89E+02	1.53E+02	5.17E+00	1.43E+00	4.17E-01	-8.12E-01	5.16E+00	5.56E+00	-1.85E+00	5.78E+00	5.94E+00	-5.60E+00	1.86E+01	2.15E+01	1.29E+03	4.30E+00	ND	ND	ND	MW-54-37
MW-54-37	Q2-2010	313	35.5	-23.4	5/3/2010	14:09	1.13E+03	2.25E+02	1.33E+02	4.71E+00	1.26E+00	5.67E-01	3.67E+00	8.43E+00	8.56E+00	1.69E+00	9.49E+00	1.11E+01	3.61E+00	2.07E+01	2.36E+01						
MW-54-37	Q3-2010	314	35.5	-23.4	8/4/2010	14:32	1.2.E+03	2.10E+02	1.30E+02	4.00E+00	8.07E-01	3.32E-01	-4.96E-01	7.38E+00	8.14E+00	-3.97E+00	9.63E+00	9.55E+00	-3.50E+00	1.50E+01	1.80E+01						
MW-54-37	Q4-2010	315	35.5	-23.4	11/23/2010	14:47	1.45E+03	2.27E+02	1.25E+02	4.51E+00	1.42E+00	3.84E-01	-2.09E+00	5.46E+00	5.80E+00	-6.89E-01	6.35E+00	6.93E+00	-3.56E+00	1.81E+01	2.15E+01						
MW-54-58	Q1-2010	312	57.5	-44.4	2/11/2010	11:46	9.04E+02	1.74E+02	1.53E+02	1.38E+00	8.76E-01	7.99E-01	3.30E-01	5.50E+00	6.29E+00	1.03E+00	7.15E+00	7.82E+00	-.32E+01	1.88E+01	2.23E+01	9.01E+02	1.71E+00	ND	ND	ND	MW-54-58
MW-54-58	Q2-2010	313	57.5	-44.4	5/3/2010	14:23	1.1.E+03	2.25E+02	1.42E+02	1.44E+00	8.33E-01	5.81E-01	6.30E-01	1.10E+01	1.30E+01	-4.85E-01	8.46E+00	9.38E+00	6.55E+00	1.99E+01	2.26E+01						
MW-54-58	Q3-2010	314	57.5	-44.4	8/4/2010	14:35	7.6.E+02	1.79E+02	1.23E+02	1.36E+00	6.88E-01	5.20E-01	-3.95E+00	9.51E+00	9.85E+00	8.15E-01	1.14E+01	1.32E+01	-5.38E-0.	1.44E+01	1.70E+01						
MW-54-58	Q4-2010	315	57.5	-44.4	11/23/2010	14:55	8.2.E+02	1.80E+02	1.23E+02	2.67E+00	1.13E+00	9.76E-01	3.33E+00	6.50E+00	7.88E+00	2.75E+00	6.57E+00	8.00E+00	-3.94E+00	1.86E+01	2.21E+01						
MW-54-123	Q1-2010	312	123	-109.9	2/11/2010	11:32	6.57E+02	1.71E+02	1.53E+02	2.40E+00	1.13E+00	7.64E-01	1.37E+00	5.43E+00	6.32E+00	8.01E-01	5.33E+00	6.09E+00	-3.73E+00	1.77E+01	2.06E+01	6.42E+02	4.37E+00	ND	ND	ND	MW-54-123
MW-54-123	Q2-2010	313	123	-109.9	5/3/2010	15:08	9.16E+02	2.04E+02	1.37E+02	2.25E+00	1.12E+00	3.35E-01	-3.24E+00	8.00E+00	8.03E+00	5.74E-01	9.62E+00	1.03E+01	-6.51E+00	1.94E+01	2.25E+01						
MW-54-123	Q3-2010	314	123	-109.9	8/4/2010	14:49	7.83E+02	1.80E+02	1.23E+02	2.98E+00	7.55E-01	4.15E-01	1.53E+00	9.99E+00	1.16E+01	-9.37E-01	8.21E+00	8.72E+00	-5.12E+00	1.64E+01	1.97E+01						
MW-54-123	Q4-2010	315	123	-109.9	11/23/2010	15:12	8.12E+02	1.80E+02	1.22E+02	7.65E+00	1.46E+00	9.15E-01	2.19E+00	6.74E+00	7.78E+00	-1.25E+00	6.18E+00	6.62E+00	5.26E+00	1.91E+01	2.15E+01						
MW-54-144	Q1-2010	312	144	-130.9	2/10/2010	10:37	1.20E+03	1.85E+02	1.53E+02	1.44E+00	2.07E+00	7.00E-01	-5.02E-01	9.22E+00	1.01E+01	-1.77E+00	7.62E+00	7.26E+00	-1.11E+01	1.88E+01	2.23E+01	1.22E+03	1.27E-01	ND	ND	ND	MW-54-144
MW-54-144	Q2-2010	313	144	-130.9	5/3/2010	11:4.	1.28E+03	2.40E+02	1.45E+02	1.37E+00	2.14E+00	5.93E-01	-3.08E+00	7.11E+00	7.03E+00	-4.60E+00	8.03E+00	6.97E+00	-6.93E+00	2.11E+01	2.46E+01						
MW-54-144	Q3-2010	314	144	-130.9	8/4/2010	11:44	1.44E+03	2.28E+02	1.33E+02	1.17E+00	1.42E+00	4.70E-01	8.06E+00	1.13E+01	1.44E+01	1.72E+00	8.79E+00	1.05E+01	1.78E+00	1.89E+01	2.21E+01						
MW-54-144	Q4-2010	315	144	-130.9	11/23/2010	12:30	1.34E+03	2.15E+02	1.21E+02	1.08E+00	1.6E+00	5.83E-01	1.02E+00	7.82E+00	8.59E+00	-3.87E+00	6.48E+00	5.93E+00	2.30E+00	1.91E+01	2.21E+01						
MW-54-173	Q1-2010	312	172.5	-159.4	2/10/2010	10:34	1.6.E+03	2.00E+02	1.53E+02	7.51E+00	1.53E+00	7.44E-01	2.39E+00	5.21E+00	6.19E+00	1.33E+00	5.76E+00	6.72E+00	9.09E+00	2.13E+01	2.50E+01	1.67E+03	6.10E+00	ND	ND	ND	MW-54-173
MW-54-173	Q2-2010	313	172.5	-159.4	5/3/2010	11:47	2.03E+03	2.84E+02	1.42E+02	6.28E+00	1.42E+00	5.94E-01	-3.87E-01	8.87E+00	9.74E+00	2.77E+00	7.82E+00	9.75E+00	-.68E+00	2.03E+01	2.33E+01						
MW-54-173	Q3-2010	314	172.5	-159.4	8/4/2010	12:09	1.53E+03	2.31E+02	1.30E+02	5.97E+00	1.02E+00	3.24E-01	-7.48E+00	8.07E+00	7.10E+00	4.85E-01	9.46E+00	1.03E+01	-.31E+00	1.68E+01	1.99E+01						
MW-54-173	Q4-2010	315	172.5	-159.4	11/23/2010	12:25	1.5.E+03	2.28E+02	1.24E+02	4.65E+00	1.28E+00	3.17E-01	-1.84E+00	7.05E+00	7.31E+00	-1.82E+00	6.23E+00	6.51E+00	2.22E+00	1.84E+01	2.14E+01						
MW-54-190	Q1-2010	312	190	-176.9	2/10/2010	10:33	1.57E+03	1.98E+02	1.54E+02	1.35E+01	2.67E+00	5.73E-01	2.34E+00	4.98E+00	6.01E+00	1.64E-01	5.19E+00	5.77E+00	-9.59E+00	1.68E+01	1.99E+01	1.70E+03	2.32E-01	ND	ND	ND	MW-54-190
MW-54-190	Q2-2010	313	190	-176.9	5/3/2010	12:0.	1.7.E+03	2.67E+02	1.44E+02	2.22E+00	2.61E+00	5.32E-01	3.30E+00	1.05E+01	1.25E+01	-3.30E+00	1.11E+01	1.14E+01	-6.89E+00	2.24E+01	2.60E+01						
MW-54-190	Q3-2010	314	190	-176.9	8/4/2010	12:34	1.60E+03	2.33E+02	1.23E+02	1.57E+00	1.51E+00	2.87E-01	-1.62E+00	8.25E+00	8.88E+00	-1.20E+00	8.80E+00	9.41E+00	-3.22E+00	1.84E+01	2.21E+01						
MW-54-190	Q4-2010	315	190	-176.9	11/23/2010	12:22	1.93E+03	2.55E+02	1.27E+02	1.92E+00	1.89E+00	7.12E-01	-9.64E-01	6.04E+00	6.61E+00	-2.29E+00	6.71E+00	6.79E+00	-3.18E-0.	1.81E+01	2.14E+01						
MW-55-24	Q1-2010	313	.6	2.3	2/18/2010	14:0.	3.2.E+03	2.49E+02	1.74E+02	1.06E+00	2.46E+00	7.08E-01	4.30E+00	4.18E+00	5.27E+00	7.07E-01	4.32E+00	4.92E+00	-8.06E+01	1.86E+01	2.18E+01	1.61E+03	1.49E-01	ND	ND	ND	MW-55-24
MW-55-24	Q2-2010	314	.6	2.3	4/21/2010	14:08	1.62E+03	4.65E+02	3.93E+02	1.94E+00	2.09E+00	3.38E-01	-1.91E+00	7.12E+00	7.46E+00	6.65E-01	9.22E+00	1.03E+01	-7.52E-0.	1.79E+01	2.07E+01						
MW-55-24	Q3-2010	315	.6	2.3	8/6/2010	13:1.	1.2.E+03	2.12E+02	1.30E+02	8.64E+00	1.2E+00	4.51E-01	1.13E+00	8.94E+00	1.04E+01	8.02E-01	8.22E+00	9.59E+00	1.17E+0.	1.64E+01	1.81E+01						
MW-55-24	Q4-2010	316	.6	2.3	11/1/2010	14:10	1.39E+03	2.09E+02	1.65E+02	1.08E+00	1.98E+00	9.92E-01	-2.29E-01	8.11E+00	9.04E+00	-4.71E+00	7.93E+00	6.54E+00	7.56E+00	1.88E+01	2.12E+01						
MW-55-35	Q1-2010	312	32	-13.8	2/18/2010	14:03	2.49E+03	2.60E+02	1.74E+02	3.10E+00	3.39E+00	7.35E-01	-2.47E+00	4.86E+00	5.03E+00	1.05E+00	4.83E+00	5.63E+00	-5.22E+01	1.83E+01	2.13E+01	1.99E+03	2.13E-01	ND	ND	ND	MW-55-35
MW-55-35	Q2-2010	313	32	-13.8	4/21/2010	14:3.	2.0.E+03	4.92E+02	3.93E+02	2.63E+00	2.44E+00	7.84E-01	-4.26E+00	8.04E+00	7.79E+00	2.77E+00	7.27E+00	9.17E+00	-4.98E-0.	1.77E+01	2.06E+01						
MW-55-35	Q3-2010	314	32	-13.8	8/6/2010	13:15	1.89E+03	2.46E+02	1.25E+02	1.66E+00	1.65E+00	3.57E-01	-4.27E-01	8.60E+00	9.69E+00	4.3.E+00	9.66E+00	1.22E+01	9.65E+00	1.62E+01	1.81E+01						
MW-55-35	Q4-2010	315	32	-13.8	11/1/2010	14:26	1.57E+03	2.12E+02	1.62E+02	1.13E+00	1.57E+00	9.17E-01	2.41E+00	8.88E+00	9.16E+00	5.35E-01	8.18E+00	9.32E+00	6.22E+00	1.79E+01	2.03E+01						
MW-55-54	Q1-2010	313	47	-28.8	2/18/2010	14:05	8.23E+03	4.13E+02	1.74E+02	1.67E+00	2.22E+00	7.61E-01	-1.16E+00	3.60E+00	3.94E+00	6.65E-01	4.04E+00	4.57E+00	-.58E+01	1.80E+01	2.15E+01	9.49E+03	1.36E-01	ND	ND	ND	MW-55-54
MW-55-54	Q2-2010	314	47	-28.8	4/21/2010	13:56	1.13E+04	9.27E+02	3.83E+02	2.32E+00	2.11E+00	3.38E-01	-5.23E+00	1.21E+01	1.49E+01	-4.30E+00	1.11E+01	1.10E+01	-3.67E+00	1.79E+01	2.09E+01						
MW-55-54	Q3-2010	315	47	-28.8	8/6/2010	12:50	9.74E+03	5.22E+02	1.23E+02	1.93E+00	1.88E+00	3.96E-01	-1.51E+00	7.77E+00	8.26E+00	1.82E+00	7.26E+00	8.71E+00	-1.77E-0.	1.41E+01	1.65E+01						
MW-55-54	Q4-2010	316	47	-28.8	11/1/2010	13:36	8.63E+03	3.95E+02	1.57E+02	1.93E+00	1.72E+00	5.48E-01	3.03E+00	7.29E+00	7.24E+00	9.52E-01	7.50E+00	8.63E+00	.12E-01	1.77E+01	2.04E+01						

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Table 3 - Fourth Quarter 2010 Groundwater Analytical Results and Averages.xlsx,
Q4 2010 TABLE 3

See Page 5 for Notes

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TABLE 3
FOURTH QUARTER 2010 GROUNDWATER ANALYTICAL RESULTS AND AVERAGES
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLING QUARTER[2]	SAMPLE ID	SAMPLE ZONE CENTER, Depth Ft Below Top of Casing[3]	SAMPLE ZONE CENTER, Elevation Ft msl[3]	SAMPLE COLLECTION Date	SAMPLE COLLECTION Time	TRITIUM (pCi/L) Result	TRITIUM (pCi/L) Std. Dev.[10]	TRITIUM (pCi/L) MDC	Sr-90 (pCi/L) Result	Sr-90 (pCi/L) Std. Dev.[10]	Sr-90 (pCi/L) MDC	Cs-137 (pCi/L) Result	Cs-137 (pCi/L) Std. Dev.[10]	Cs-137 (pCi/L) MDC	Co-60 (pCi/L) Result	Co-60 (pCi/L) Std. Dev.[10]	Co-60 (pCi/L) MDC	Ni-63 (pCi/L) Result	Ni-63 (pCi/L) Std. Dev.[10]	Ni-63 (pCi/L) MDC	YEARLY ROLLING AVERAGES[4] TRITIUM (pCi/L) Average	Sr-90 (pCi/L) Average	Cs-137 (pCi/L) Average	Co-60 (pCi/L) Average	Ni-63 (pCi/L) Average	Well ID[1]
MW-56-53	Q2-2010	308	52	18.3	4/20/2010	15:33	3.58E+03	1.65E+02	1.75E+03	-1.49E-01	5.35E-01	7.58E-01	3.51E-00	7.63E+00	9.44E+00	-1.55E+00	8.91E+00	9.63E+00	NA	NA	NA	3.61E+03	ND	ND	ND	NA	MW-56-53
MW-56-53	Q4-2010	309	52	18.3	11/15/2010	12:48	4.64E+02	1.88E+02	3.82E+02	1.27E+00	8.67E-01	1.86E+00	3.71E-00	4.39E+00	1.06E+01	-1.74E+00	4.89E+00	9.95E+00	NA	NA	NA						
MW-56-83	Q2-2010	310	74	-3.7	4/20/2010	14:51	1.93E+03	2.96E+02	1.43E+02	1.99E+00	1.15E+00	3.74E-01	2.34E-00	8.03E+00	9.48E+00	-1.05E+00	8.71E+00	9.04E+00	NA	NA	NA	2.34E+03	1.99E-00	ND	ND	NA	MW-56-83
MW-56-83	Q4-2010	311	74	-3.7	11/15/2010	14:37	2.74E+03	2.63E+02	3.64E+02	1.02E+00	7.06E-01	1.50E+00	-2.51E+00	3.87E+00	7.83E+00	-2.07E+00	3.90E+00	7.34E+00	NA	NA	NA						
MW-57-11	Q2-2010	306	10	5	5/4/2010	12:36	3.27E+03	3.48E+02	1.72E+02	[illegible]	3.10E+00	3.46E-01	8.17E-01	6.20E+00	6.51E+00	1.85E-01	5.09E+00	5.67E+00	-1.79E+01	2.21E+01	2.56E+01	3.27E+03	2.46E-01	ND	ND	ND	MW-57-11
MW-57-20	Q2-2010	306	9	-4	5/4/2010	12:45	8.07E+02	2.04E+02	1.61E+02	1.12E+00	9.05E-01	3.77E-01	-2.11E+00	7.95E+00	8.24E+00	-2.23E-01	7.54E+00	8.55E+00	-6.07E+00	2.19E+01	2.51E+01	8.07E+02	1.12E-00	ND	ND	ND	MW-57-20
MW-57-45	Q2-2010	307	40	-25	5/4/2010	13:24	8.79E+02	2.19E+02	1.72E+02	1.30E+00	9.43E-01	3.65E-01	6.16E-02	5.31E+00	5.86E+00	-2.59E-01	4.77E+00	5.15E+00	7.57E-01	2.26E+01	2.58E+01	8.79E+02	1.30E-00	ND	ND	ND	MW-57-45
MW-58-26	Q2-2010	310	30	-5.4	4/30/2010	14:13	5.75E+02	1.80E+02	1.82E+02	3.92E-01	5.47E-01	6.20E-01	4.22E-01	5.59E+00	6.27E+00	9.40E-01	5.75E+00	6.63E+00	NA	NA	NA	4.71E+02	ND	ND	ND	NA	MW-58-26
MW-58-26	Q4-2010	311	30	-5.4	11/11/2010	15:11	3.66E+02	1.73E+02	1.44E+02	4.13E-01	7.39E-01	3.92E-01	1.38E-00	3.81E+00	4.51E+00	2.98E+00	3.75E+00	4.71E+00	NA	NA	NA						
MW-58-65	Q2-2010	310	54	-39.4	4/30/2010	13:51	3.59E+02	1.64E+02	1.72E+02	2.38E-02	5.17E-01	5.40E-01	1.50E-00	8.09E+00	9.07E+00	3.34E-01	5.75E+00	6.63E+00	NA	NA	NA	4.20E+02	ND	ND	ND	NA	MW-58-65
MW-58-65	Q4-2010	311	54	-39.4	11/11/2010	13:53	4.81E+02	1.88E+02	1.45E+02	7.15E-01	7.72E-01	3.31E-01	2.51E-01	3.71E+00	4.18E+00	3.74E+00	4.41E+00	5.49E+00	NA	NA	NA						
MW-60-35	Q1-2010	312	34.9	-22.4	3/1/2010	11:18	2.43E+02	1.64E+02	1.71E+02	5.09E-01	6.33E-01	7.32E-01	1.33E+00	6.15E+00	5.99E+00	1.00E+00	3.76E+00	4.07E+00	1.11E+01	1.33E+01	2.21E+01	2.56E+02	ND	ND	ND	ND	MW-60-35
MW-60-35	Q2-2010 Mid	313	34.9	-22.4	5/10/2010	15:58	2.85E+02	1.46E+02	1.35E+02	2.89E-02	5.05E-01	5.56E-01	-1.78E+00	7.56E+00	8.03E+00	-1.43E+00	9.12E+00	9.75E+00	4.12E-01	2.24E+01	2.56E+01						
MW-60-35	Q3-2010	314	34.9	-22.4	8/16/2010	14:43	2.35E+02	1.42E+02	1.41E+02	3.19E-01	6.48E-01	7.39E-01	3.02E-01	5.73E+00	6.47E+00	-1.35E+00	6.23E+00	6.63E+00	-4.52E+00	2.14E+01	2.52E+01						
MW-60-35	Q4-2010	315	34.9	-22.4	11/18/2010	13:25	2.44E+02	1.85E+02	4.00E+02	-5.33E-01	6.54E-01	1.73E+00	9.47E-01	4.80E+00	1.08E+01	-4.28E-01	4.56E+00	9.75E+00	-1.11E+01	8.47E+00	1.92E+01						
MW-60-53	Q1-2010	312	53.4	-40.9	3/1/2010	11:07	1.37E+02	1.59E+02	1.75E+02	1.14E-01	5.66E-01	7.00E-01	1.22E+00	4.51E+00	4.92E+00	8.72E-01	4.93E+00	5.33E+00	5.31E+00	1.95E+01	2.27E+01	3.02E+02	ND	ND	ND	ND	MW-60-53
MW-60-53	Q2-2010 Mid	313	53.4	-40.9	5/10/2010	16:3	3.45E+02	1.58E+02	1.41E+02	-9.87E-03	4.95E-01	5.82E-01	8.10E-01	7.58E+00	8.81E+00	-2.03E+00	8.49E+00	9.02E+00	-5.02E+00	2.07E+01	2.40E+01						
MW-60-53	Q3-2010	314	53.4	-40.9	8/16/2010	15:34	2.58E+02	1.50E+02	1.60E+02	-2.84E-03	4.87E-01	5.04E-01	-8.42E+00	7.92E+00	7.70E+00	-2.64E+00	6.03E+00	6.02E+00	-3.48E+00	1.98E+01	2.37E+01						
MW-60-53	Q4-2010	315	53.4	-40.9	11/18/2010	12:22	2.49E+02	1.83E+02	3.95E+02	-4.58E-01	4.30E-01	1.32E+00	4.54E-01	4.11E+00	9.15E+00	2.23E+00	3.57E+00	8.75E+00	1.10E+01	8.93E+00	1.96E+01						
MW-60-72	Q1-2010	312	72.4	-59.9	2/25/2010	11:3	1.27E+02	1.58E+02	1.74E+02	-5.98E-02	5.52E-01	7.30E-01	-6.83E+00	8.12E+00	7.73E+00	-1.09E+00	4.88E+00	5.25E+00	-4.85E+00	1.94E+01	2.26E+01	3.01E+02	ND	ND	ND	ND	MW-60-72
MW-60-72	Q2-2010 Mid	313	72.4	-59.9	5/10/2010	12:1	[illegible]	1.52E+02	1.40E+02	[illegible]	5.49E-01	7.10E-01	-3.66E+00	1.29E+01	1.58E+01	-7.77E+00	1.16E+01	1.10E+01	-6.97E+00	2.07E+01	2.41E+01						
MW-60-72	Q3-2010	314	72.4	-59.9	8/17/2010	11:59	2.33E+01	1.23E+02	1.44E+02	[illegible]	5.90E-01	5.91E-01	-5.91E-01	5.40E+00	6.06E+00	-1.59E+00	6.08E+00	6.57E+00	1.19E+00	2.04E+01	2.37E+01						
MW-60-72	Q4-2010	315	72.4	-59.9	11/16/2010	13:17	-2.51E+01	1.66E+02	3.93E+02	5.63E-02	[illegible]	1.33E+00	2.12E-00	5.34E+00	1.26E+01	-3.92E+00	5.07E+00	1.09E+01	[illegible]	8.52E+00	1.89E+01						
MW-60-135	Q1-2010	312	134.9	-122.4	2/25/2010	11:43	3.14E+02	1.68E+02	1.75E+02	[illegible]	5.95E-01	7.32E-01	6.39E-01	4.11E+00	4.72E+00	-5.15E+00	7.25E+00	5.27E+00	[illegible]	1.89E+01	2.18E+01	3.66E+02	ND	ND	ND	ND	MW-60-135
MW-60-135	Q2-2010 Mid	313	134.9	-122.4	5/10/2010	12:2	4.13E+02	1.80E+02	1.65E+02	-9.46E-03	6.05E-01	3.55E-01	1.55E-00	7.70E+00	9.03E+00	6.63E-03	8.37E+00	9.35E+00	-3.62E+00	2.04E+01	2.38E+01						
MW-60-135	Q3-2010	314	134.9	-122.4	8/17/2010	12:09	1.87E+02	1.39E+02	1.43E+02	-2.74E-01	5.38E-01	7.27E-01	-3.46E+00	8.41E+00	9.07E+00	-1.52E+00	6.30E+00	6.70E+00	8.77E-01	2.11E+01	2.45E+01						
MW-60-135	Q4-2010	315	134.9	-122.4	11/16/2010	13:22	[illegible]	1.82E+02	3.95E+02	-4.96E-03	7.62E-01	1.88E+00	9.16E-01	5.37E+00	1.20E+01	1.03E+00	4.53E+00	1.03E+01	8.67E-01	8.52E+00	1.90E+01						
MW-60-154	Q1-2010	312	154.4	-141.9	2/25/2010	11:45	3.73E+02	1.71E+02	1.74E+02	[illegible]	6.63E-01	7.90E-01	1.32E-00	4.73E+00	5.42E+00	-4.38E-04	4.86E+00	5.45E+00	[illegible]	1.84E+01	2.19E+01	3.04E+02	ND	ND	ND	ND	MW-60-154
MW-60-154	Q2-2010 Mid	313	154.4	-141.9	5/10/2010	12:32	4.33E+02	1.85E+02	1.69E+02	3.52E-01	6.25E-01	7.01E-01	-1.33E+00	8.40E+00	9.22E+00	1.61E-01	7.65E+00	8.61E+00	-5.15E+00	2.13E+01	2.46E+01						
MW-60-154	Q3-2010	314	154.4	-141.9	8/17/2010	12:18	2.93E+02	1.50E+02	1.45E+02	-2.33E-01	5.00E-01	5.61E-01	-4.41E-01	6.04E+00	6.67E+00	1.95E+00	6.78E+00	8.02E+00	[illegible]	2.13E+01	2.48E+01						
MW-60-154	Q4-2010	315	154.4	-141.9	11/16/2010	13:40	4.63E+02	1.94E+02	3.93E+02	3.29E-01	8.30E-01	1.94E+00	5.28E+00	4.02E+00	7.52E+00	2.29E-01	5.09E+00	1.11E+01	1.54E+00	7.53E+00	1.78E+01						
MW-60-176	Q1-2010	312	175.9	-163.4	2/25/2010	13:24	9.90E+02	2.01E+02	1.74E+02	[illegible]	3.36E-01	4.10E-01	2.32E-00	6.03E+00	6.92E+00	-3.93E-01	7.93E+00	7.23E+00	[illegible]	1.99E+01	2.30E+01	9.07E+02	ND	ND	ND	ND	MW-60-176
MW-60-176	Q2-2010 Mid	313	175.9	-163.4	5/10/2010	13:29	9.93E+02	2.24E+02	1.63E+02	-3.09E-01	4.52E-01	5.99E-01	-5.66E-01	8.13E+00	9.07E+00	9.92E-01	8.25E+00	9.75E+00	0.00E+00	2.04E+01	2.34E+01						
MW-60-176	Q3-2010	314	175.9	-163.4	8/17/2010	12:5	8.13E+02	1.91E+02	1.44E+02	-5.59E-01	6.48E-01	7.01E-01	1.23E-01	6.43E+00	7.32E+00	1.35E+00	5.80E+00	6.97E+00	0.00E+00	2.13E+01	2.48E+01						
MW-60-176	Q4-2010	315	175.9	-163.4	11/16/2010	14:06	8.33E+02	2.10E+02	3.97E+02	9.07E-01	9.42E-01	2.10E+00	-1.97E+00	4.38E+00	9.04E+00	2.85E+00	4.70E+00	1.12E+01	-6.40E+00	7.51E+00	1.78E+01						
MW-62-18	Q1-2010	312	13.5	1.2	2/9/2010	15:18	2.87E+02	1.88E+02	1.98E+02	5.26E-01	6.40E-01	5.64E-01	-1.57E+00	5.87E+00	6.19E+00	-2.93E+00	7.82E+00	7.61E+00	NA	NA	NA	2.46E+02	ND	ND	ND	NA	MW-62-18
MW-62-18	Q2-2010	313	13.5	1.2	4/13/2010	15:17	2.04E+02	1.34E+02	1.42E+02	2.74E-02	[illegible]	7.97E-01	-1.48E+00	4.05E+00	4.37E+00	6.69E-01	5.38E+00	4.95E+00	NA	NA	NA						
MW-62-18	Q3-2010	314	13.5	1.2	8/3/2010	13:00	1.14E+02	1.32E+02	1.44E+02	6.60E-01	6.55E-01	5.80E-01	3.08E-00	6.40E+00	1.03E+01	5.07E+00	1.02E+01	1.32E+01	NA	NA	NA						
MW-62-18	Q4-2010	315	13.5	1.2	11/9/2010	11:57	7.43E+01	1.71E+02	3.85E+02	-1.05E-02	[illegible]	1.54E+00	2.37E-00	4.55E+00	1.07E+01	-6.86E-01	4.79E+00	1.01E+01	NA	NA	NA						
MW-62-37	Q1-2010	312	34.5	-19.8	2/9/2010	15:40	3.93E+02	1.95E+02	1.98E+02	-1.80E-01	4.98E-01	5.66E-01	-2.99E+00	4.96E+00	4.83E+00	-2.34E-01	5.97E+00	6.51E+00	NA	NA	NA	2.81E+02	ND	ND	ND	NA	MW-62-37
MW-62-37	Q2-2010	313	34.5	-19.8	4/13/2010	15:22	2.59E+02	2.07E+02	2.25E+02	5.46E-01	7.33E-01	7.81E-01	-2.42E+00	3.86E+00	4.07E+00	1.34E+00	4.04E+00	4.80E+00	NA	NA	NA						
MW-62-37	Q3-2010	314	34.5	-19.8	8/3/2010	12:52	[illegible]	1.43E+02	1.47E+02	-1.52E-03	5.47E-01	5.85E-01	-9.69E-01	8.78E+00	9.70E+00	-5.33E+00	9.12E+00	7.92E+00	NA	NA	NA						
MW-62-37	Q4-2010	315	34.5	-19.8	11/9/2010	11:56	6.09E+01	1.70E+02	3.85E+02	[illegible]	6.69E-01	1.47E+00	-8.46E-02	4.49E+00	9.91E+00	3.83E+00	4.28E+00	1.07E+01	NA	NA	NA						
MW-62-53	Q1-2010	311	53.1	-40.3	2/9/2010	14:08	3.46E+02	1.92E+02	1.93E+02	-1.50E-01	4.35E-01	5.61E-01	-9.19E-01	5.87E+00	6.39E+00	1.34E+00	6.06E+00	7.13E+00	NA	NA	NA	2.77E+02	ND	ND	ND	NA	MW-62-53
MW-62-53	Q2-2010	312	53.1	-40.3	4/13/2010	15:27	3.25E+02	1.44E+02	1.47E+02	-1.84E-03	5.67E-01	7.67E-01	1.33E-00	3.35E+00	3.87E+00	-1.52E+00	5.03E+00	4.03E+00	NA	NA	NA						
MW-62-53	Q3-2010	313	53.1	-40.3	8/3/2010	12:20	1.59E+02	1.40E+02	1.47E+02	3.13E-01	5.61E-01	5.32E-01	2.29E-00	1.11E+01	1.33E+01	2.39E-01	7.18E+00	8.24E+00	NA	NA	NA						
MW-62-53	Q4-2010	314	53.1	-40.3	11/9/2010	12:49	2.05E+02	1.77E+02	3.83E+02	8.32E-02	6.79E-01	1.59E+00	-4.23E+00	4.83E+00	9.52E+00	-2.63E+00	5.26E+00	1.04E+01	NA	NA	NA						
MW-62-71	Q1-2010	312	71.1	-58.3	2/9/2010	13:20	4.56E+02	2.00E+02	1.99E+02	4.07E-01	4.74E-01	4.89E-01	4.29E-00	5.40E+00	6.65E+00	-2.85E+00	5.37E+00	5.09E+00	NA	NA	NA	3.94E+02	ND	ND	ND	NA	MW-62-71
MW-62-71	Q2-2010	313	71.1	-58.3	4/13/2010	13:45	[illegible]	2.10E+02	2.33E+02	-2.24E-01	5.04E-01	5.12E-01	-6.51E-01	4.44E+00	4.86E+00	-3.24E+00	5.89E+00	4.62E+00	NA	NA	NA						
MW-62-71	Q3-2010	314	71.1	-58.3	8/3/2010	11:30	3.25E+02	1.70E+02	1.77E+02	2.44E-01	3.75E-01	1.12E+00	2.03E+00	8.37E+00	8.99E+00	1.86E+00	9.87E+00	1.15E+01	NA	NA	NA						
MW-62-71	Q4-2010	315	71.1	-58.3	11/9/2010	11:02	4.17E+02	1.83E+02	3.82E+02	-5.74E-03	6.02E-01	1.52E+00	-6.58E-01	3.90E+00	8.41E+00	-4.59E+00	5.63E+00	1.09E+01	NA	NA	NA						
MW-62-92	Q1-2010	312	91.6	-78.8	2/9/2010	13:28	5.27E+02	2.03E+02	1.93E+02	4.06E-01	6.20E-01	5.83E-01	-2.81E+00	7.35E+00	6.45E+00	2.57E+00	6.50E+00	7.81E+00	NA	NA	NA	4.81E+02	ND	ND	ND	NA	MW-62-92
MW-62-92	Q2-2010	313	91.6	-78.8	4/13/2010	13:38	5.96E+02	1.55E+02	1.44E+02	[illegible]	6.38E-01	3.34E-01	1.16E-00	3.72E+00	4.24E+00	7.23E-03	3.75E+00	4.13E+00	NA	NA	NA						
MW-62-92	Q3-2010	314	91.6	-78.8	8/3/2010	11:37	3.13E+02	1.68E+02	1.75E+02	4.11E-01	5.37E-01	5.80E-01	-3.42E+00	8.17E+00	8.38E+00	-4.99E-01	7.59E+00	8.35E+00	NA	NA	NA						
MW-62-92	Q4-2010	315	91.6	-78.8	11/9/2010	11:15	4.82E+02	1.88E+02	3.85E+02	-9.75E-01	7.72E-01	1.95E+00	-2.96E+00	5.42E+00	1.17E+01	1.77E+00	4.84E+00	1.12E+01	NA	NA	NA						
MW-62-138	Q1-2010	312	138.1	-125.3	2/9/2010	15:54	[illegible]	2.18E+02	1.99E+02	8.78E-01	6.50E-01	5.24E-01	2.72E-00	5.00E+00	6.09E+00	-3.55E+00	4.79E+00	4.02E+00	NA	NA	NA	6.75E+02	1.21E-00	ND	ND	NA	MW-62-138
MW-62-138	Q2-2010	313	138.1	-125.3	4/13/2010	18:02	6.54E+02	1.59E+02	1.45E+02	1.28E+00	7.41E-01	5.91E-01	-7.33E-01	6.39E+00	5.98E+00	-2.33E+00	6.71E+00	5.83E+00	NA	NA	NA						
MW-62-138	Q3-2010	314	138.1	-125.3	8/3/2010	14:00	[illegible]	1.82E+02	1.75E+02	1.47E+00	7.40E-01	5.56E-01	3.33E-00	7.26E+00	8.95E+00	-1.73E+00	7.35E+00	7.33E+00	NA	NA	NA						
MW-62-138	Q4-2010	315	138.1	-125.3	11/9/2010	14:3	[illegible]	2.07E+02	4.45E+02	-1.05E-01	[illegible]	1.57E+00	-1.42E+00	4.04E+00	8.57E+00	[illegible]	4.68E+00	1.11E+01	NA	NA	NA						
MW-62-182	Q1-2010	312	182.1	-169.3	2/9/2010	16:07	4.69E+02	2.10E+02	2.13E+02	-2.03E-01	[illegible]	4.91E-01	9.56E-01	5.40E+00	6.26E+00	-2.02E-01	5.46E+00	6.05E+00	NA	NA	NA	4.25E+02	ND	ND	ND	NA	MW-62-182
MW-62-182	Q2-2010	313	182.1	-169.3	4/13/2010	18:18	4.77E+02	1.52E+02	1.45E+02	2.86E-01	6.55E-01	7.61E-01	9.31E-01	3.92E+00	4.57E+00	3.69E-01	4.09E+00	4.65E+00	NA	NA	NA						
MW-62-182	Q3-2010	314	182.1	-169.3	8/3/2010	14:02	2.78E+02	1.65E+02	1.75E+02	2.87E-01	7.05E-01	3.30E-01	-5.53E+00	1.24E+01	1.51E+01	-9.25E-01	8.00E+00	8.64E+00	NA	NA	NA						
MW-62-182	Q4-2010	315	182.1	-169.3	11/9/2010	14:43	4.76E+02	1.88E+02	3.87E+02	1.02E+00	[illegible]	1.46E+00	-2.35E+00	4.16E+00	8.56E+00	1.94E+00	5.26E+00	1.21E+01	NA	NA	NA						
MW-63-18	Q1-2010	312	14.9	0.7	3/8/2010	13:40	3.38E+02	1.68E+02	1.78E+02	5.39E-01	7.74E-01	3.34E-01	5.19E-00	4.35E+00	5.44E+00	4.45E-01	4.41E+00	5.03E+00	NA	NA	NA	2.84E+02	ND	ND	ND	NA	MW-63-18
MW-63-18	Q2-2010	313	14.9	0.7	4/26/2010	13:22	3.16E+02	1.55E+02	1.47E+02	7.37E-03	6.62E-01	3.66E-01	3.73E-01	5.22E+00	5.91E+00	3.24E+00	6.03E+00	7.53E+00	NA	NA	NA						
MW-63-18	Q3-2010	314	14.9	0.7	8/10/2010	12:08	1.63E+02	1.58E+02	1.73E+02	-1.55E-03	3.48E-01	4.72E-01	-6.04E-01	7.20E+00	8.11E+00	-2.17E+00	6.42E+00	6.45E+00	NA	NA	NA						
MW-63-18	Q4-2010	315	14.9	0.7	11/2/2010	12:22	1.97E+02	1.18E+02	1.13E+02	[illegible]	6.87E-01	3.18E-01	1.31E-00	5.46E+00	6.40E+00	3.45E+00	6.55E+00	8.07E+00	NA	NA	NA						
MW-63-34	Q1-2010	312	31.5	-17.3	3/8/2010	13:19	3.96E+02	1.70E+02	1.73E+02	[illegible]	6.78E-01	3.09E-01	-6.36E-01	3.94E+00	4.33E+00	-8.85E-01	4.26E+00	4.63E+00	NA	NA	NA	3.04E+02	ND	ND	ND	NA	MW-63-34
MW-63-34	Q2-2010	313	31.5	-17.3	4/26/2010	13:2	2.89E+02	1.53E+02	1.47E+02	-3.04E-01	[illegible]	3.93E-01	-5.64E-01	5.55E+00	5.88E+00	-1.02E+00	5.19E+00	5.37E+00	NA	NA	NA						
MW-63-34	Q3-2010	314	31.5	-17.3	8/10/2010	11:44	1.89E+02	1.64E+02	1.73E+02	2.21E-01	3.59E-01	3.95E-01	2.50E-00	9.25E+00	1.06E+01	3.10E+00	7.21E+00	9.27E+00	NA	NA	NA						
MW-63-34	Q4-2010	315	31.5	-17.3	11/2/2010	13:04	[illegible]	1.35E+02	1.14E+02	3.11E-01	5.72E-01	3.45E-01	1.16E-01	5.66E+00	6.29E+00	-2.31E+00	6.33E+00	6.51E+00	NA	NA	NA						
MW-63-50	Q1-2010	312	49.5	-37.2	3/8/2010	12:43	3.34E+02	1.67E+02	1.77E+02	5.42E-01	7.40E-01	7.92E-01	-1.46E+00	3.23E+00	3.55E+00	7.99E-01	3.33E+00	3.81E+00	NA	NA	NA	3.37E+02	ND	ND	ND	NA	MW-63-50
MW-63-50	Q2-2010	313	49.5	-37.2	4/26/2010	12:06	4.13E+02	1.62E+02	1.45E+02	2.38E-01	5.82E-01	5.82E-01	-5.57E+00	1.01E+01	1.12E+01	-4.30E+00	6.74E+00	6.45E+00	NA	NA	NA						
MW-63-50	Q3-2010	314	49.5	-37.2	8/10/2010	14:32	2.72E+02	1.65E+02	1.75E+02	-2.47E-03	5.47E-01	5.90E-01	-1.32E+00	7.10E+00	7.82E+00	7.73E-01	7.74E+00	8.95E+00	NA	NA	NA						
MW-63-50	Q4-2010	315	49.5	-37.2	11/2/2010	15:07	3.29E+02	1.31E+02	1.12E+02	2.27E-01	6.33E-01	7.23E-01	-2.98E-02	7.72E+00	8.42E+00	2.76E+00	8.00E+00	9.73E+00	NA	NA	NA						
MW-63-93	Q1-2010	313	93	-80.7	3/8/2010	13:00	2.90E+02	1.65E+02	1.77E+02	1.78E-01	6.63E-01	3.06E-01	-1.10E+00	4.41E+00	4.71E+00	5.93E-01	4.54E+00	5.11E+00	NA	NA	NA	2.57E+02	ND	ND	ND	NA	MW-63-93
MW-63-93	Q2-2010	314	93	-80.7	4/26/2010	12:42	3.03E+02	1.55E+02	1.47E+02	-2.90E-02	5.61E-01	7.42E-01	-6.91E-01	5.55E+00	6.23E+00	-3.69E+00	5.52E+00	5.35E+00	NA	NA	NA						
MW-63-93	Q3-2010	315	93	-80.7	8/10/2010	15:10	1.95E+02	1.61E+02	1.74E+02	[illegible]	4.38E-01	5.16E-01	1.24E-00	6.64E+00	7.70E+00	2.61E-01	7.58E+00	8.45E+00	NA	NA	NA						
MW-63-93	Q4-2010	316	93	-80.7	11/2/2010	15:08	2.39E+02	1.21E+02	1.11E+02	3.29E-01	5.72E-01	5.42E-01	-4.18E-02	4.95E+00	5.64E+00	3.33E+00	5.80E+00	7.11E+00	NA	NA	NA						
MW-63-112	Q1-2010	312	111.5	-99.2	3/8/2010	13:14	3.80E+02	1.70E+02	1.79E+02	6.50E-01	7.33E-01	7.33E-01	6.93E-01	3.86E+00	4.28E+00	2.23E+00	5.70E+00	4.89E+00	NA	NA	NA	3.75E+02	ND	ND	ND	NA	MW-63-112
MW-63-112	Q2-2010	313	111.5	-99.2	4/26/2010	12:39	4.47E+02	1.64E+02	1.42E+02	4.81E-01	5.84E-01	5.06E-01	4.15E-00	6.75E+00	8.37E+00	4.44E+00	7.86E+00	9.87E+00	NA	NA	NA						
MW-63-112	Q3-2010	314	111.5	-99.2	8/10/2010	14:52	[illegible]	1.73E+02	1.73E+02	2.83E-01	4.37E-01	4.78E-01	-3.00E+00	7.68E+00	7.90E+00	-5.23E+00	9.73E+00	9.11E+00	NA	NA	NA						
MW-63-112	Q4-2010	315	111.5	-99.2	11/2/2010	15:05	[illegible]	1.29E+02	1.13E+02	6.02E-02	5.35E-01	5.51E-01	-2.54E+00	6.29E+00	6.56E+00	1.96E+00	6.72E+00	7.95E+00	NA	NA	NA						
MW-63-121	Q1-2010	312	121	-108.7	3/8/2010	13:18	5.15E+02	1.74E+02	1.77E+02	3.18E-01	6.45E-01	7.40E-01	-2.07E-01	3.90E+00	4.30E+00	-2.48E-01	5.33E+00	4.92E+00	NA	NA	NA	5.45E+02	ND	ND	ND	NA	MW-63-121
MW-63-121	Q2-2010	313	121	-108.7	4/26/2010	12:59	6.06E+02	1.80E+02	1.45E+02	4.17E-01	6.09E-01	5.57E-01	3.57E-00	6.06E+00	7.40E+00	1.16E+00	6.13E+00	7.15E+00	NA	NA	NA						
MW-63-121	Q3-2010	314	121	-108.7	8/10/2010	11:28	5.39E+02	1.80E+02	1.77E+02	3.67E-01	5.93E-01	5.58E-01	-9.48E-01	8.12E+00	8.95E+00	-6.58E-01	8.76E+00	9.53E+00	NA	NA	NA						
MW-63-121	Q4-2010	315	121	-108.7	11/2/2010	11:40	5.20E+02	1.49E+02	1.10E+02	6.36E-01	7.57E-01	5.11E-01	1.17E-00	6.60E+00	7.66E+00	-4.05E+00	7.17E+00	6.83E+00	NA	NA	NA						
MW-63-163	Q1-2010	312	162.5	-150.2	3/8/2010	15:36	5.04E+02	1.77E+02	1.78E+02	-1.49E-01	5.64E-01	7.93E-01	-8.47E-02	6.83E+00	5.81E+00	9.37E-01	4.95E+00	5.83E+00	NA	NA	NA	4.65E+02	ND	ND	ND	NA	MW-63-163
MW-63-163	Q2-2010	313	162.5	-150.2	4/26/2010	14:30	5.29E+02	1.70E+02	1.43E+02	[illegible]	5.64E-01	5.75E-01	-1.45E+00	7.71E+00	8.86E+00	-2.93E+00	6.17E+00	5.91E+00	NA	NA	NA						
MW-63-163	Q3-2010	314	162.5	-150.2	8/10/2010	11:2	4.13E+02	1.74E+02	1.73E+02	2.45E-01	4.43E-01	4.98E-01	-6.87E-01	8.55E+00	9.17E+00	-5.25E-01	8.23E+00	9.24E+00	NA	NA	NA						
MW-63-163	Q4-2010	315	162.5	-150.2	11/2/2010	11:49	4.44E+02	1.41E+02	1.10E+02	[illegible]	8.38E-01	3.77E-01	-3.99E+00	9.88E+00	1.10E+01	2.94E+00	6.12E+00	7.63E+00	NA	NA	NA						
MW-63-174	Q1-2010	312	174	-161.7	3/8/2010	15:33	5.05E+02	1.74E+02	1.78E+02	3.28E-03	6.35E-01	3.03E-01	-9.48E-02	3.76E+00	4.18E+00	-2.02E+00	3.76E+00	3.88E+00	NA	NA	NA	4.00E+02	ND	ND	ND	NA	MW-63-174
MW-63-174	Q2-2010	313	174	-161.7	4/26/2010	14:28	4.98E+02	1.71E+02	1.45E+02	-1.69E-03	5.53E-01	7.24E-01	2.58E-00	4.74E+00	5.86E+00	-4.63E+00	5.26E+00	4.32E+00	NA	NA	NA						
MW-63-174	Q3-2010	314	174	-161.7	8/10/2010	11:40	3.33E+02	1.65E+02	1.71E+02	3.54E-01	5.43E-01	5.01E-01	-3.32E+00	7.07E+00	6.89E+00	-1.41E+00	7.84E+00	8.11E+00	NA	NA	NA						
MW-63-174	Q4-2010	315	174	-161.7	11/2/2010	11:50	2.63E+02	1.26E+02	1.13E+02	1.42E-01	4.59E-01	5.06E-01	6.01E-01	6.03E+00	6.82E+00	2.17E-01	6.42E+00	7.11E+00	NA	NA	NA						
MW-66-21	Q1-2010	312	14.1	0	2/22/2010	14:36	9.60E+02	2.00E+02	1.75E+02	8.97E-01	7.30E-01	7.14E-01	4.96E-01	4.72E+00	5.31E+00	-1.35E+00	5.07E+00	5.41E+00	-5.33E+00	1.96E+01	2.28E+01	9.53E+02	1.33E-00	ND	ND	ND	MW-66-21
MW-66-21	Q2-2010	313	14.1	0	4/9/2010	15:27	9.50E+02	4.07E+02	3.82E+02	[illegible]	4.34E-01	5.44E-01	3.09E-00	6.75E+00	8.43E+00	3.15E+00	5.19E+00	7.13E+00	-3.25E+00	1.92E+01	2.25E+01						
MW-66-21	Q3-2010	314	14.1	0	8/9/2010	12:30	1.07E+03	2.01E+02	1.29E+02	1.17E+00	5.52E-01	4.41E-01	-5.85E+00	9.45E+00	9.54E+00	-9.97E-01	8.07E+00	8.65E+00	[illegible]	1.19E+01	1.37E+01						
MW-66-21	Q4-2010	315	14.1	0	11/10/2010	15:13	3.23E+02	1.64E+02	3.45E+02	2.57E-01	7.74E-01	1.84E+00	6.04E-00	5.26E+00	1.28E+01	1.51E-01	5.67E+00	1.25E+01	5.56E+00	8.45E+00	1.85E+01						

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TABLE 3
FOURTH QUARTER 2010 GROUNDWATER ANALYTICAL RESULTS AND AVERAGES
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLING QUARTER[2]	SAMPLE ID	SAMPLE ZONE CENTER, Depth Ft Below Top of Casing[3]	SAMPLE ZONE CENTER, Elevation Ft msl[3]	SAMPLE COLLECTION Date	SAMPLE COLLECTION Time	TRITIUM (pCi/L) Result	TRITIUM Std. Dev.[10]	TRITIUM MDC	Sr-90 (pCi/L) Result	Sr-90 Std. Dev.[10]	Sr-90 MDC	Cs-137 (pCi/L) Result	Cs-137 Std. Dev.[10]	Cs-137 MDC	Co-60 (pCi/L) Result	Co-60 Std. Dev.[10]	Co-60 MDC	Ni-63 (pCi/L) Result	Ni-63 Std. Dev.[10]	Ni-63 MDC	YEARLY ROLLING AVERAGES[4] TRITIUM (pCi/L) Average	Sr-90 (pCi/L) Average	Cs-137 (pCi/L) Average	Co-60 (pCi/L) Average	Ni-63 (pCi/L) Average	Well ID[1]
MW-66-36	Q1-2010	011	33.6	-19.5	3/22/2010	14:04	3.43E+03	2.91E+02	1.75E+03	7.03E+00	1.53E+00	7.17E-01	4.16E-01	4.70E+00	5.29E+00	4.35E-01	5.42E+00	6.03E+00	-8.21E+00	1.64E+01	2.26E+01	3.32E+03	6.98E+00	ND	ND	ND	MW-66-36
MW-66-36	Q2-2010	012	33.6	-19.5	4/9/2010	15:17	3.64E+03	5.90E+02	3.87E+02	7.05E+00	1.16E+00	7.54E-01	1.79E+00	7.65E+00	9.10E+00	6.63E+00	8.54E+00	1.20E+01	-7.64E+00	1.69E+01	2.02E+01						
MW-66-36	Q3-2010	013	33.6	-19.5	8/9/2010	11:47	3.03E+03	3.06E+02	1.24E+02	6.40E+00	1.07E+00	3.74E-01	-1.53E+00	8.82E+00	9.41E+00	4.62E+00	7.61E+00	1.02E+01	4.59E+00	1.58E+01	1.80E+01						
MW-66-36	Q4-2010	014	33.6	-19.5	11/10/2010	12:33	3.13E+03	2.96E+02	3.95E+02	7.43E+00	1.03E+00	1.13E+00	5.42E+00	3.87E+00	9.67E+00	7.13E-01	4.34E+00	9.81E+00	-4.23E+00	9.03E+00	2.16E+01						
MW-67-39	Q1-2010	012	33.3	-25.8	3/3/2010	13:54	2.55E+03	2.63E+02	1.75E+02	1.24E+01	1.29E+00	4.63E-01	-9.37E-01	5.29E+00	5.81E+00	2.05E+00	6.38E+00	7.62E+00	-9.06E+00	2.13E+01	2.32E+01	3.20E+03	9.33E+00	ND	ND	ND	MW-67-39
MW-67-39	Q2-2010	013	33.3	-25.8	5/6/2010	15:38	3.30E+03	3.60E+02	1.73E+02	9.77E+00	1.69E+00	5.74E-01	-1.53E+00	9.44E+00	1.08E+01	-1.11E+00	7.71E+00	8.22E+00	-1.04E+01	2.13E+01	2.48E+01						
MW-67-39	Q3-2010	014	33.3	-25.8	8/9/2010	10:43	3.37E+03	3.15E+02	1.22E+02	8.52E+00	1.21E+00	5.69E-01	-9.27E+00	1.08E+01	1.30E+01	-1.39E+00	8.28E+00	8.77E+00	-2.31E+00	1.43E+01	1.69E+01						
MW-67-39	Q4-2010	015	33.3	-25.8	11/10/2010	11:49	3.56E+03	3.09E+02	3.95E+02	5.43E+00	8.85E-01	1.10E+00	1.04E+00	3.90E+00	8.88E+00	2.83E+00	4.30E+00	1.04E+01	-1.86E+00	9.87E+00	2.21E+01						
MW-67-105	Q1-2010	011	104.8	-92.3	3/3/2010	14:0	1.59E+03	2.28E+02	1.79E+02	5.90E-01	7.56E-01	8.05E-01	-2.99E-01	4.00E+00	4.38E+00	-1.57E+00	4.14E+00	4.26E+00	-4.08E+00	1.94E+01	2.23E+01	1.38E+03	2.19E+00	ND	ND	ND	MW-67-105
MW-67-105	Q2-2010	012	104.8	-92.3	5/6/2010	15:46	1.54E+03	2.60E+02	1.64E+02	1.77E+00	1.01E+00	7.88E-01	4.33E-01	8.65E+00	9.84E+00	3.5.E+00	1.01E+01	1.24E+01	-6.18E+00	2.07E+01	2.40E+01						
MW-67-105	Q3-2010	013	104.8	-92.3	8/9/2010	10:37	1.26E+03	2.10E+02	1.24E+02	2.61E+00	8..6E-01	5.26E-01	1.46E+00	6.24E+00	7.48E+00	1.75E+00	5.78E+00	7.23E+00	5.56E+00	1.69E+01	1.90E+01						
MW-67-105	Q4-2010	014	104.8	-92.3	11/10/2010	11:42	1.14E+03	2.24E+02	3.95E+02	1.41E+00	8..2E-01	1.69E+00	1.68E+00	3.55E+00	7.64E+00	3.12E+00	4.14E+00	8.25E+00	1.24E+00	8.56E+00	1.90E+01						
MW-67-173	Q1-2010	012	172.3	-159.8	3/3/2010	14:2.	8.70E+02	1.98E+02	1.83E+02	-5.05E-01	5.66E-01	9.10E-01	-3.74E+00	5.84E+00	5.23E+00	3.45E-01	3.84E+00	4.42E+00	-1.67E+00	1.95E+01	2.26E+01	7.11E+02	ND	ND	ND	ND	MW-67-173
MW-67-173	Q2-2010	013	172.3	-159.8	5/6/2010	16:03	6.73E+02	2.03E+02	1.65E+02	-1.35E-01	4.87E-01	7.07E-01	-3.30E+00	9.64E+00	1.02E+01	-8.48E-01	1.00E+01	1.11E+01	-7.30E+00	2.01E+01	2.37E+01						
MW-67-173	Q3-2010	014	172.3	-159.8	8/9/2010	11:0.	6.72E+02	1.71E+02	1.27E+02	.70E-02	4.44E-01	5.35E-01	-7.06E-01	1.34E+01	1.68E+01	6.44E-01	8.97E+00	1.04E+01	-.44E+00	1.14E+01	1.34E+01						
MW-67-173	Q4-2010	015	172.3	-159.8	11/10/2010	12:04	6.25E+02	2.01E+02	3.97E+02	2.99E-01	6.33E-01	.86E+00	4.02E-01	7.80E+00	1.12E+01	1.17E+00	4.83E+00	1.03E+01	.65E+00	8.09E+00	1.81E+01						
MW-67-219	Q1-2010	011	218.8	-206.3	3/3/2010	11:23	1.09E+03	2.07E+02	1.79E+02	3.26E-01	7.37E-01	3.53E-01	-2.20E+00	3.00E+00	3.18E+00	1.8.E+00	3.13E+00	3.73E+00	4.96E+00	1.89E+01	2.15E+01	1.14E+03	ND	ND	ND	ND	MW-67-219
MW-67-219	Q2-2010	012	218.8	-206.3	5/6/2010	11:5.	1.20E+03	2.40E+02	1.65E+02	.78E-01	6.31E-01	7.71E-01	2.27E+00	8.87E+00	1.05E+01	2.35E+00	7.38E+00	9.29E+00	-7.98E+00	1.95E+01	2.31E+01						
MW-67-219	Q3-2010	013	218.8	-206.3	8/9/2010	13:33	1.1.E+03	2.01E+02	1.25E+02	9.94E-02	5.32E-01	5.41E-01	-7.99E-01	8.14E+00	9.12E+00	-6.19E+00	9.03E+00	8.33E+00	2.34E+00	1.21E+01	1.39E+01						
MW-67-219	Q4-2010	014	218.8	-206.3	11/10/2010	13:40	1.15E+03	2.24E+02	3.95E+02	3.53E-01	7.28E-01	.78E+00	-2.80E-01	3.60E+00	7.62E+00	2.43E-01	3.62E+00	7.83E+00	-4.41E+00	8.84E+00	1.98E+01						
MW-67-276	Q1-2010	011	275.3	-262.8	3/3/2010	11:25	1.1.E+03	2.10E+02	1.83E+02	-1.30E-01	5.78E-01	8.23E-01	1.09E+00	3.92E+00	4.54E+00	-3.85E+00	6.67E+00	4.43E+00	-1.73E+00	1.92E+01	2.21E+01	1.04E+03	ND	ND	ND	ND	MW-67-276
MW-67-276	Q2-2010	012	275.3	-262.8	5/6/2010	12:20	1.09E+03	2.33E+02	1.65E+02	-1.16E-01	5.38E-01	7.47E-01	-1.34E+00	7.98E+00	8.70E+00	2.02E+00	9.16E+00	1.09E+01	5.78E+00	2.03E+01	2.27E+01						
MW-67-276	Q3-2010	013	275.3	-262.8	8/9/2010	13:50	9.33E+02	1.66E+02	1.22E+02	4.00E-01	4.66E-01	4.98E-01	2.56E+00	7.22E+00	8.80E+00	-2.39E+00	8.22E+00	8.27E+00	5.94E+00	1.28E+01	1.42E+01						
MW-67-276	Q4-2010	014	275.3	-262.8	11/10/2010	14:16	1.0.E+03	2.18E+02	3.95E+02	-7.85E-01	5.64E-01	.77E+00	1.04E+00	4.26E+00	9.92E+00	-5.43E+00	4.42E+00	7.41E+00	5.46E+00	8.55E+00	1.89E+01						
MW-67-323	Q1-2010	011	322.3	-309.8	3/3/2010	11:3.	4.7.E+02	1.80E+02	1.83E+02	3.29E-01	7.45E-01	8.63E-01	-5.78E-01	3.68E+00	4.08E+00	-1.86E-01	3.66E+00	4.05E+00	8.96E+00	1.96E+01	2.21E+01	4.49E+02	ND	ND	ND	ND	MW-67-323
MW-67-323	Q2-2010	012	322.3	-309.8	5/6/2010	12:30	4.44E+02	1.83E+02	1.67E+02	-1.63E-01	4.58E-01	5.67E-01	-2.50E+00	7.72E+00	7.87E+00	2.97E-01	8.21E+00	9.30E+00	-1.13E+01	1.96E+01	2.33E+01						
MW-67-323	Q3-2010	013	322.3	-309.8	8/9/2010	13:23	4.33E+02	1.48E+02	1.23E+02	6.38E-01	6.31E-01	5.53E-01	1.47E+00	6.88E+00	8.02E+00	3.23E-01	6.72E+00	7.55E+00	-4.51E+00	1.27E+01	1.63E+01						
MW-67-323	Q4-2010	014	322.3	-309.8	11/10/2010	14:03	3.83E+02	1.89E+02	3.94E+02	.89E-01	8.21E-01	2.01E+00	2.70E+00	4.61E+00	1.06E+01	3.11E-01	5.07E+00	1.12E+01	-3.22E+00	7.93E+00	1.78E+01						
MW-67-340	Q1-2010	011	339.8	-327.3	3/3/2010	11:48	5.97E+02	1.85E+02	1.79E+02	.19E-01	5.07E-01	5.26E-01	4.32E-01	4.41E+00	5.05E+00	2.43E+00	4.80E+00	5.85E+00	2.20E+00	1.91E+01	2.19E+01	5.68E+02	ND	ND	ND	ND	MW-67-340
MW-67-340	Q2-2010	012	339.8	-327.3	5/6/2010	12:24	6.5.E+02	2.00E+02	1.65E+02	-2.13E-01	4.06E-01	7.01E-01	-2.61E+00	7.77E+00	8.17E+00	3.62E-01	8.78E+00	1.00E+01	-5.47E+00	1.94E+01	2.28E+01						
MW-67-340	Q3-2010	013	339.8	-327.3	8/9/2010	13:20	4.86E+02	1.55E+02	1.25E+02	3.81E-02	5.00E-01	5.29E-01	1.20E+00	7.44E+00	8.75E+00	2.42E+00	6.98E+00	7.05E+00	2.60E+00	1.45E+01	1.67E+01						
MW-67-340	Q4-2010	014	339.8	-327.3	11/10/2010	13:53	5.3.E+02	1.97E+02	3.95E+02	-3.93E-01	5.00E-01	.64E+00	1.72E+00	4.50E+00	1.03E+01	-2.97E+00	3.90E+00	7.25E+00	2.25E+00	8.84E+00	1.97E+01						
MW-107	Q2-2010	009	31.7	110.1	4/22/2010	10:1.	9.67E+01	1.64E+02	1.83E+02	-7.61E-03	5.33E-01	5.74E-01	9.25E-01	6.08E+00	6.99E+00	-1.88E+00	7.25E+00	7.55E+00	NA	NA	NA	ND	ND	ND	ND	NA	MW-107
MW-111	Q1-2010	031	15.5	2.4	3/2/2010	14:27	2.63E+04	1.94E+03	4.29E+02	1.07E+00	5.60E-01	4.40E-01	1.37E+00	3.62E+00	4.27E+00	-1.55E-01	3.90E+00	4.43E+00	NA	NA	NA	3.82E+04	1.45E+00	6.79E+00	ND	NA	MW-111
MW-111	Q2-2010	032	15.5	2.4	4/21/2010	14:48	3.35E+04	1.07E+03	1.91E+02	1.48E+00	7.26E-01	5.28E-01	6.79E+00	6.54E+00	4.32E+00	1.70E+00	4.37E+00	5.13E+00	NA	NA	NA						
MW-111	Q3-2010	033	15.5	2.4	8/27/2010	15:2.	3.86E+04	1.13E+03	1.23E+02	6.44E-01	8.07E-01	3.55E-01	-8.83E-01	6.30E+00	6.59E+00	1.83E+00	5.70E+00	6.84E+00	NA	NA	NA						
MW-111	Q3-2010 Mid	034	15.5	2.4	9/10/2010	14:09	4.69E+04	1.37E+03	1.40E+02	1.80E+00	1.00E+00	3.02E-01	-5.04E+00	6.84E+00	6.88E+00	-5.62E-01	6.84E+00	7.62E+00	NA	NA	NA						
MW-111	Q4-2010	035	15.5	2.4	11/1/2010	14:55	4.59E+04	1.34E+03	1.27E+02	3.47E-01	5.90E-01	5.60E-01	-1.99E-01	5.63E+00	6.38E+00	5.49E+00	5.91E+00	7.75E+00	NA	NA	NA						
U3-4D	Q1-2010	023	25.6	-10.8	2/12/2010	14:15	8.65E+02	1.85E+02	1.77E+02	-1.60E-02	6.00E-01	7.86E-01	7.15E-01	3.14E+00	3.69E+00	1.0.E+00	3.66E+00	4.34E+00	NA	NA	NA	8.53E+02	ND	ND	ND	NA	U3-4D
U3-4D	Q2-2010	024	25.6	-10.8	4/12/2010	12:49	1.07E+03	2.06E+02	1.77E+02	-4.68E-02	5.46E-01	7.39E-01	-5.85E+00	9.33E+00	8.95E+00	-2.13E+00	8.04E+00	7.89E+00	NA	NA	NA						
U3-4D	Q3-2010	025	25.6	-10.8	7/23/2010	13:2.	6.84E+02	1.86E+02	1.77E+02	-1.56E-01	4.60E-01	5.46E-01	2.21E+00	7.56E+00	8.91E+00	-1.01E+00	7.61E+00	8.14E+00	NA	NA	NA						
U3-4D	Q4-2010	026	25.6	-10.8	10/28/2010	14:04	7.13E+02	1.68E+02	1.13E+02	2.26E-01	4.89E-01	5.61E-01	2.75E+00	5.75E+00	6.97E+00	1.33E+00	7.82E+00	9.00E+00	NA	NA	NA						
U3-4S	Q3-2010	001			7/23/2010	14:13	3.74E+02	1.74E+02	1.79E+02	3.76E-01	4.75E-01	4.21E-01	9.30E-01	8.51E+00	9.30E+00	1.89E+00	7.75E+00	9.37E+00	NA	NA	NA	3.63E+02	ND	ND	ND	NA	U3-4S
U3-4S	Q4-2010	002			10/29/2010	11:40	3.5.E+02	1.32E+02	1.10E+02	3.86E-01	5.82E-01	5.43E-01	1.54E+00	5.59E+00	6.52E+00	-2.02E+00	5.91E+00	6.14E+00	NA	NA	NA						
U3-T1	Q1-2010	027	5.7	2.8	2/10/2010	12:03	4.76E+02	1.73E+02	1.73E+02	2.19E-01	6.55E-01	7.88E-01	-1.28E+00	6.23E+00	5.80E+00	2.73E+00	3.74E+00	4.73E+00	NA	NA	NA	4.16E+02	ND	ND	ND	NA	U3-T1
U3-T1	Q2-2010	028	5.7	2.8	5/5/2010	16:57	5.00E+02	1.79E+02	1.84E+02	6.48E-02	4.95E-01	5.97E-01	3.25E+00	8.92E+00	1.04E+01	8.61E-01	6.62E+00	7.15E+00	NA	NA	NA						
U3-T1	Q3-2010	029	5.7	2.8	7/26/2010	12:15	3.84E+02	1.74E+02	1.73E+02	.20E-02	3.91E-01	4.99E-01	5.07E+00	7.68E+00	9.77E+00	-6.61E-01	6.96E+00	7.49E+00	NA	NA	NA						
U3-T1	Q4-2010	030	5.7	2.8	10/29/2010	16:04	3.04E+02	1.28E+02	1.10E+02	4.84E-02	6.36E-01	7.68E-01	-8.56E-01	6.04E+00	6.70E+00	1.59E+00	5.73E+00	6.79E+00	NA	NA	NA						
U3-T2	Q1-2010	032	5.7	2.6	2/11/2010	12:43	9.4.E+02	1.88E+02	1.73E+02	5.85E-01	7.12E-01	8.17E-01	-8.06E-01	3.32E+00	3.63E+00	7.23E-02	3.71E+00	4.13E+00	NA	NA	NA	1.07E+03	ND	ND	ND	NA	U3-T2
U3-T2	Q2-2010	033	5.7	2.6	5/7/2010	13:05	9.75E+02	1.95E+02	1.83E+02	6.31E-01	6.31E-01	5.58E-01	2.27E+00	5.70E+00	5.99E+00	1.65E+00	6.62E+00	6.97E+00	NA	NA	NA						
U3-T2	Q3-2010	034	5.7	2.6	7/26/2010	14:26	8.76E+02	1.92E+02	1.74E+02	5.34E-01	6..2E-01	5.47E-01	-2.12E+00	7.50E+00	7.69E+00	2.29E+00	7.21E+00	8.84E+00	NA	NA	NA						
U3-T2	Q4-2010	035	5.7	2.6	10/29/2010	11:22	1.47E+03	2.19E+02	1.11E+02	4.22E-01	6.79E-01	7.56E-01	-6.11E-02	5.42E+00	6.11E+00	3.00E+00	5.47E+00	6.89E+00	NA	NA	NA						
U1-CSS	Q2-2010	014	34	6.	5/3/2010	15:58	1.88E+03	2.79E+02	1.73E+02	8.95E+00	1.81E+00	3.92E-01	4.31E-01	5.87E+00	6.66E+00	3.94E+00	5.22E+00	6.83E+00	-1.79E+01	2.18E+01	2.53E+01	2.07E+03	1.04E-01	ND	ND	ND	U1-CSS
U1-CSS	Q4-2010	015	4	6	11/8/2010	14:56	2.26E+03	2.72E+02	1.25E+02	1.18E+00	1.45E+00	5.84E-01	2.29E+00	5.01E+00	5.93E+00	2.07E+00	5.61E+00	6.71E+00	3.16E-01	1.81E+01	2.13E+01						
U1-NCD	Q1-2010	007			1/4/2010	9:00	5.47E+03	3.48E+02	1.81E+02	6.40E+0.	3.23E+00	4.39E-01	1.14E-04	1.58E+03	6.64E+00	8.53E-01	2.52E+00	2.89E+00	2.31E+02	2.85E+01	2.15E+01	7.44E+03	5.11E-01	1.16E+04	ND	2.51E+02	U1-NCD
U1-NCD	Q3-2010	008			7/15/2010	9:10	1.35E+04	4.41E+02	1.53E+02	5.06E+0.	3.21E+00	7.59E-01	1.14E-04	1.42E+03	1.40E+01	7.51E-01	5.21E+00	6.03E+00	2.90E+02	3.29E+01	2.40E+01						
U1-NCD	Q4-2010	009			10/20/2010	13:40	3.34E+03	3.23E+02	1.27E+02	.88E+0.	2.11E+00	5.39E-01	1.20E-04	1.47E+03	9.98E+00	-1.14E+00	4.96E+00	5.42E+00	2.31E+02	3.19E+01	2.23E+01						
U1-SFDS	Q1-2010	008			/6/2010	8:50	5.10E+02	1.83E+02	1.81E+02	1.25E+0	1.46E+00	4.47E-01	8.18E+00	4.07E+00	2.98E+00	-5.94E-01	2.91E+00	3.13E+00	-3.06E+01	1.84E+01	2.15E+01	5.45E+02	1.43E-01	1.24E+0	ND	ND	U1-SFDS
U1-SFDS	Q3-2010	009			7/7/2010	8:45	6.44E+02	1.80E+02	1.45E+02	1.88E+0.	2.10E+00	5.82E-01	2.09E-01	1.26E+01	7.48E+00	1.64E+00	7.91E+00	9.44E+00	3.42E+00	2.24E+01	2.58E+01						
U1-SFDS	Q4-2010	010			10/20/2010	8:45	4.83E+02	1.56E+02	1.25E+02	1.17E+0.	1.83E+00	3.74E-01	7.39E+00	7.54E+00	5.78E+00	-8.31E-01	5.24E+00	5.67E+00	9.71E-01	1.86E+01	2.18E+01						
I-2	Q3-2010	001			8/2/2010	14:28	6.2.E+01	1.52E+02	1.79E+02	-2.56E-01	3.72E-01	5.25E-01	7.34E+00	7.80E+00	1.02E+01	9.24E-02	6.54E+00	7.19E+00	NA	NA	NA	ND	ND	ND	ND	NA	I-2
I-2	Q4-2010	002			11/17/2010	14:25	1.74E+02	1.71E+02	3.73E+02	2.25E-01	6.25E-01	.50E+00	-4.50E-01	5.04E+00	1.10E+01	3.35E+00	5.94E+00	1.40E+01	NA	NA	NA						
MH-5 VCFD	Q1-2010	008			2/18/2010	13:46	2.08E+02	1.59E+02	1.71E+02	6.25E-02	3.27E-01	4.08E-01	-1.18E+00	4.41E+00	4.80E+00	-1.81E+00	4.11E+00	4.15E+00	NA	NA	NA	2.11E+03	ND	ND	ND	NA	MH-5 VCFD
MH-5 VCFD	Q2-2010 Mid	009			5/17/2010	10:15	4.33E+02	1.73E+02	1.79E+02	3.66E-01	5.84E-01	5.48E-01	2.13E+00	6.00E+00	7.18E+00	4.52E-01	6.63E+00	7.65E+00	NA	NA	NA						
MH-5 VCFD	Q3-2010	010			8/5/2010	14:45	7.32E+02	1.89E+02	1.77E+02	5.37E-01	5.67E-01	5.84E-01	7.26E-01	7.72E+00	8.69E+00	2.25E+00	6.93E+00	7.07E+00	NA	NA	NA						
MH-5 VCFD	Q3-2010	011			8/30/2010	13:30	9.96E+03	5.48E+02	1.25E+02	.25E-01	3.21E-01	3.81E-01	1.50E+00	5.58E+00	6.48E+00	8.03E-01	6.51E+00	7.53E+00	NA	NA	NA						
MH-5 VCFD	Q3-2010 Mid	012			9/10/2010	15:30	8.80E+02	1.89E+02	1.25E+02	3.60E-01	6.35E-01	7.11E-01	7.21E-01	6.45E+00	7.44E+00	1.23E+00	5.71E+00	6.85E+00	NA	NA	NA						
MH-5 VCFD	Q4-2010	013			11/24/2010	11:10	4.60E+02	1.86E+02	1.47E+02	.36E-01	7.57E-01	3.85E-01	1.75E+00	3.45E+00	4.02E+00	5.43E-01	3.79E+00	4.23E+00	NA	NA	NA						
LAF-002	Q2-2010 Mid	013		-22.3	5/11/2010	13:44	-4.21E+01	1.32E+02	1.63E+02	6.55E-01	7.37E-01	7.78E-01	-1.49E+00	6.90E+00	7.60E+00	1.64E+00	6.08E+00	7.34E+00	-6.88E+01	2.31E+01	3.54E+01	ND	ND	ND	ND	ND	LAF-002
LAF-002	Q4-2010	014		-22.3	11/22/2010	14:4.	1.0.E+02	1.13E+02	1.21E+02	.96E-01	4.62E-01	5.40E-01	-6.13E-01	6.13E+00	6.83E+00	-1.01E+00	5.88E+00	6.13E+00	1.65E+00	1.77E+01	2.05E+01						
B-1	Q1-2010	007			2/23/2010	14:10	1.49E+03	2.13E+02	1.69E+02	4.61E-02	3.80E-01	3.80E-01	4.53E-01	5.45E+00	6.44E+00	-6.69E-01	7.14E+00	5.88E+00	NA	NA	NA	4.67E+03	ND	1.71E+0.	ND	NA	B-1
B-1	Q2-2010	008			4/23/2010	10:44	8.13E+02	1.91E+02	1.65E+02	2.22E-01	5.20E-01	5.03E-01	9.79E-01	7.91E+00	6.38E+00	5.59E-01	6.24E+00	7.21E+00	NA	NA	NA						
B-1	Q3-2010	009			8/17/2010	15:40	1.40E+04	6.48E+02	1.27E+02	.25E-01	6.43E-01	7.01E-01	2.27E-01	1.06E+01	5.87E+00	2.06E+00	6.00E+00	7.45E+00	NA	NA	NA						
B-1	Q4-2010	010			11/17/2010	11:10	2.37E+03	2.72E+02	3.85E+02	6.87E-01	7.68E-01	.72E+00	1.39E-01	6.40E+00	7.93E+00	8.39E-01	4.32E+00	9.74E+00	NA	NA	NA						
B-6	Q1-2010	007			2/19/2010	9:56	3.73E+02	1.65E+02	1.68E+02	.14E-02	3.57E-01	4.59E-01	1.43E+00	4.13E+00	4.84E+00	2.21E-01	3.96E+00	4.54E+00	NA	NA	NA	3.78E+02	ND	ND	ND	NA	B-6
B-6	Q2-2010 Mid	008			5/18/2010	9:40	4.48E+01	1.62E+02	1.84E+02	-1.02E-01	4.47E-01	5.71E-01	5.39E-01	5.50E+00	6.34E+00	2.33E-01	5.50E+00	6.27E+00	NA	NA	NA						
B-6	Q3-2010	009			8/5/2010	13:43	1.49E+02	1.64E+02	1.78E+02	.12E-01	8.02E-01	7.78E-01	2.52E-01	6.57E+00	8.03E+00	-9.21E-02	8.23E+00	9.37E+00	NA	NA	NA						
B-6	Q4-2010	010			11/8/2010	11:45	1.05E+02	1.33E+02	1.43E+02	.43E-01	6.60E-01	7.68E-01	0.10E+00	5.04E+00	6.20E+00	-3.20E-01	4.70E+00	5.22E+00	NA	NA	NA						

Notes:
1 For nested multi-level monitoring wells, suffix of well ID indicates depth (rounded to nearest foot) from reference point on casing to bottom of well screen. For Waterloo multi-level systems, suffix indicates depth (rounded to nearest foot) from reference point on casing to top of sampling port. Well IDs without a suffix are open bedrock well bores
2 All analytical results from the last 12 months from each location are provided. Monitoring locations are sampled quarterly, bi-annually, or annually, and as necessary during the year
3 Sampling depths within sampling intervals (i.e. location of pump intake) have been located adjacent to the transmissive zone where possible
4 Averages provided are analytical result averages of all valid samples (including mid-quarter and confirmatory samples) collected from each monitoring location from the first quarter of 2010 (Q1-2010) to the forth quarter of 2010 (Q4-2010) including post quarter samples
Monitoring locations are sampled quarterly, bi-annually, or annually and additional samples are collected when necessary. Therefore, some results provided are the average of more than 4 samples
For quarters in which samples were reanalyzed due to potential false positives, both results were used to calculate averages if subsequent results confirmed the validity of the original sample analysis. For cases in which reanalysis discredited the validity of the original sample result, the replacement results were used to calculate the average. If analytical results resulted in resampling, and the resample result discredited the validity of the original sample result of a particular radionuclide, the original sample results were not used for any radionuclides and only the resample result was used. For cases in which an aliquot of the original sample was reanalyzed, if the result of the aliquot confirmed the original result, then the aliquot result and the original result were averaged and the average of the two was used to calculate the rolling average. If the aliquot result indicated the original result was false, then only the aliquot result was used to calculate the rolling average
5 NA indicates that the constituent was not analyzed
6 ND indicates that all of the analytical results used to calculate the average were less than MDC and/or 3 times the 1 sigma uncertainty
7 Dot pattern denotes sampling interval is positioned within overburden. Open box indicates sampling interval is in bedrock
8 These locations are storm drains
9 Mid-quarter samples were collected and analyzed to evaluate the potential effect of certain operations on groundwater quality
10 Column designated as "Std Dev" provides the three times 1 sigma uncertainty values

IPEC00266266

TABLE 4
2010 4th QUARTER
GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERTY CENTER
BUCHANAN, NY

ANALYSIS RESULTS

Well ID[1]	SAMPLE ID	SAMPLE COLLECTION Date	SAMPLE COLLECTION Time	TRITIUM (pCi/L) Result	TRITIUM Std. Dev.[2]	TRITIUM MDC	TRITIUM I.L.[3]	Sr-90 (pCi/L) Result	Sr-90 Std. Dev.[2]	Sr-90 MDC	Sr-90 I.L.[3]
MW-30-69	036	11/5/2010	11:56	1.25E+05	1.88E+03	4.34E+02	2.14E+05	9.67E-01	8.79E-01	1.94E+00	2.00E+00
MW-30-84	027	11/5/2010	12:35	1.02E+04	4.60E+02	3.67E+02	1.22E+04	5.25E-01	7.30E-01	1.70E+00	2.00E+00
MW-31-49	028	11/3/2010	11:55	3.35E+04	9.81E+02	1.15E+02	4.28E+04	-3.04E-02	4.26E-01	5.51E-01	2.00E+00
MW-31-63	028	11/3/2010	12:12	2.95E+04	9.02E+02	1.14E+02	3.99E+04	3.31E-01	6.30E-01	7.13E-01	2.20E+00
MW-31-85	028	11/3/2010	12:10	6.06E+03	4.16E+02	1.14E+02	1.46E+04	2.41E-01	4.83E-01	5.47E-01	2.00E+00
MW-32-59	022	11/3/2010	12:08	1.58E+04	6.66E+02	1.16E+02	3.42E+04	2.02E-01	6.15E-01	7.14E-01	2.00E+00
MW-32-85	025	11/3/2010	12:45	1.49E+04	6.48E+02	1.16E+02	1.63E+04	3.80E-01	4.90E-01	5.36E-01	2.00E+00
MW-32-149	022	11/3/2010	16:09	1.55E+03	2.24E+02	1.12E+02	1.00E+03	4.03E-01	5.02E-01	5.49E-01	2.00E+00
MW-32-173	020	11/3/2010	15:53	1.40E+03	2.16E+02	1.14E+02	1.50E+03	1.65E-02	4.38E-01	5.34E-01	2.00E+00
MW-32-190	024	11/3/2010	16:07	1.53E+03	2.28E+02	1.17E+02	4.21E+03	-9.74E-02	4.25E-01	5.32E-01	2.00E+00
MW-36-24	020	11/4/2010	16:15	2.62E+03	2.82E+02	1.13E+02	2.56E+03	3.79E-01	5.81E-01	6.42E-01	2.00E+00
MW-36-41	014	11/4/2010	16:55	1.22E+04	5.75E+02	1.10E+02	2.10E+04	3.54E+00	9.13E-01	6.12E-01	1.09E-01
MW-36-52	019	11/4/2010	15:55	7.08E+03	4.40E+02	1.10E+02	1.48E+04	4.73E+00	1.11E+00	6.76E-01	6.99E+00
MW-37-22	020	11/4/2010	14:28	4.46E+03	3.57E+02	1.12E+02	9.19E+03	1.33E+01	1.33E+00	5.33E-01	2.13E-01
MW-37-32	020	11/4/2010	13:14	5.99E+03	4.22E+02	1.17E+02	9.32E+03	-2.91E-01	6.15E-01	7.91E-01	3.91E-01
MW-37-40	020	11/4/2010	12:06	6.41E+03	4.29E+02	1.15E+02	9.02E+03	1.28E+01	1.92E+00	6.32E-01	1.67E-01
MW-37-57	020	11/4/2010	13:49	6.72E+03	4.41E+02	1.15E+02	9.62E+03	1.97E+01	2.15E+00	5.70E-01	5.37E-01
MW-39-67	010	11/15/2010	16:28	3.74E+02	1.86E+02	3.88E+02	1.00E+03	1.96E+00	9.26E-01	1.94E+00	5.72E+00
MW-39-84	010	11/15/2010	16:38	2.51E+02	2.10E+02	4.59E+02	1.00E+03	1.80E+00	8.83E-01	1.86E+00	3.16E+00
MW-39-102	010	11/15/2010	16:12	3.61E+02	1.83E+02	3.84E+02	1.00E+03	1.40E+00	9.00E-01	1.93E+00	3.64E+00
MW-39-124	010	11/15/2010	12:26	3.73E+02	1.83E+02	3.86E+02	1.00E+03	1.17E+00	8.85E-01	1.53E+00	2.79E+00
MW-39-133	010	11/15/2010	12:43	-3.02E+01	1.61E+02	3.88E+02	1.00E+03	4.14E-01	7.56E-01	1.57E+00	2.00E+00
MW-39-195	010	11/15/2010	13:25	2.16E+02	1.86E+02	4.09E+02	1.00E+03	1.52E-01	7.35E-01	1.73E+00	2.00E+00
MW-40-27	013	11/29/2010	15:23	2.06E+02	1.49E+02	1.44E+02	1.00E+03	1.10E-01	7.98E-01	9.63E-01	2.00E+00
MW-40-46	014	11/29/2010	16:16	1.63E+02	1.47E+02	1.48E+02	1.00E+03	6.60E-02	7.89E-01	9.38E-01	2.00E+00
MW-40-81	014	11/29/2010	12:03	2.48E+02	1.58E+02	1.47E+02	1.00E+03	1.13E-03	6.45E-01	7.85E-01	2.00E+00
MW-40-100	016	11/29/2010	12:12	1.34E+02	1.40E+02	1.46E+02	1.00E+03	-2.12E-01	6.70E-01	8.39E-01	2.00E+00
MW-40-127	016	11/29/2010	12:26	1.22E+02	1.38E+02	1.45E+02	1.00E+03	7.34E-01	9.02E-01	9.13E-01	2.00E+00
MW-40-162	014	11/29/2010	12:45	6.40E+01	1.27E+02	1.45E+02	1.00E+03	-5.51E-03	6.55E-01	7.94E-01	2.00E+00
MW-41-40	018	10/25/2010	16:06	2.43E+03	2.73E+02	1.17E+02	1.00E+03	4.03E+00	1.15E+00	6.72E-01	9.12E+00
MW-41-63	017	10/25/2010	12:49	5.06E+02	1.50E+02	1.14E+02	1.00E+03	4.25E+00	1.14E+00	7.77E-01	2.09E+00
MW-42-49	023	10/27/2010	12:23	1.28E+03	2.03E+02	1.64E+02	3.16E+04	1.81E+01	2.31E+00	8.12E-01	6.19E-02
MW-42-78	018	10/27/2010	13:56	6.13E+02	1.74E+02	1.64E+02	1.00E+03	-1.14E-01	4.79E-01	5.87E-01	2.00E+00
MW-43-28	017	10/25/2010	11:29	1.95E+02	1.17E+02	1.13E+02	1.00E+03	-1.98E-01	5.01E-01	6.94E-01	2.00E+00
MW-43-62	017	10/25/2010	11:06	9.76E+01	1.05E+02	1.12E+02	1.00E+03	3.67E-01	7.10E-01	8.03E-01	2.00E+00
MW-44-66	018	10/26/2010	14:46	3.10E+02	1.29E+02	1.11E+02	1.00E+03	-1.07E-01	4.30E-01	5.95E-01	2.00E+00
MW-44-102	019	10/26/2010	13:12	4.47E+02	1.42E+02	1.12E+02	1.00E+03	2.42E-01	5.47E-01	6.33E-01	2.00E+00
MW-45-42	022	10/22/2010	15:19	2.74E+03	2.90E+02	1.13E+02	5.90E+03	9.55E-02	5.19E-01	6.32E-01	2.00E+00
MW-45-61	022	10/22/2010	11:54	1.51E+03	2.22E+02	1.12E+02	2.65E+03	3.53E-01	5.53E-01	6.05E-01	2.00E+00
MW-46	022	10/28/2010	13:25	3.13E+03	3.08E+02	1.13E+02	1.84E+03	3.75E-01	5.09E-01	5.49E-01	2.00E+00
MW-49-26	022	11/11/2010	14:23	2.59E+03	3.00E+02	4.76E+02	6.52E+03	-3.42E-01	9.56E-01	2.14E+00	2.72E-01
MW-49-42	022	11/11/2010	14:13	2.39E+03	2.73E+02	4.02E+02	4.97E+03	1.99E+01	1.65E+00	1.12E+00	3.06E-01
MW-49-65	022	11/11/2010	14:18	1.37E+03	2.34E+02	3.97E+02	3.03E+03	1.41E+01	1.45E+00	1.14E+00	2.70E-01
MW-50-42	023	11/12/2010	12:10	8.67E+02	1.83E+02	1.22E+02	1.04E+03	3.73E+00	1.31E+00	9.89E-01	8.20E+00
MW-50-66	028	11/12/2010	12:20	3.72E+03	3.30E+02	1.20E+02	5.90E+03	2.33E+01	2.71E+00	9.50E-01	5.56E-01
MW-51-40	017	11/30/2010	12:54	1.48E+02	1.41E+02	1.44E+02	1.00E+03	1.45E-01	6.05E-01	7.12E-01	2.00E+00
MW-51-79	017	11/30/2010	13:08	3.11E+01	1.21E+02	1.44E+02	1.00E+03	-1.22E-01	4.22E-01	5.34E-01	2.00E+00
MW-51-104	015	11/30/2010	9:55	8.54E+01	1.33E+02	1.47E+02	1.00E+03	3.74E-01	7.18E-01	8.12E-01	2.00E+00
MW-51-135	015	11/30/2010	9:57	9.53E+01	1.33E+02	1.45E+02	1.00E+03	4.21E-01	7.13E-01	7.98E-01	2.00E+00
MW-51-163	015	11/30/2010	10:02	9.01E+01	1.31E+02	1.44E+02	1.00E+03	-3.11E-01	6.98E-01	9.94E-01	2.00E+00
MW-51-189	015	11/30/2010	9:55	6.91E+01	1.29E+02	1.46E+02	1.00E+03	1.93E-01	7.99E-01	9.81E-01	2.00E+00
MW-53-82	017	10/27/2010	12:07	2.59E+03	2.79E+02	1.10E+02	3.83E+03	8.07E-01	7.90E-01	8.36E-01	4.60E+00
MW-53-120	021	10/27/2010	12:48	3.91E+03	3.38E+02	1.11E+02	1.05E+04	2.96E+01	2.91E+00	7.02E-01	5.54E-01
MW-54-37	015	11/23/2010	14:47	1.45E+03	2.27E+02	1.26E+02	2.71E+03	4.51E+00	1.42E+00	9.84E-01	1.18E-01
MW-54-58	015	11/23/2010	14:35	8.21E+02	1.80E+02	1.23E+02	1.48E+03	2.67E+00	1.13E+00	9.06E-01	3.65E+00
MW-54-123	015	11/23/2010	15:12	8.12E+02	1.80E+02	1.22E+02	1.30E+03	7.65E+00	1.45E+00	9.15E-01	9.08E+00
MW-54-144	015	11/23/2010	12:30	1.34E+03	2.15E+02	1.21E+02	2.64E+03	1.03E+01	1.35E+00	5.83E-01	2.92E-01
MW-54-173	015	11/23/2010	12:25	1.51E+03	2.28E+02	1.24E+02	3.64E+03	4.65E+00	1.28E+00	8.77E-01	1.17E-01
MW-54-190	015	11/23/2010	12:22	1.93E+03	2.55E+02	1.27E+02	3.49E+03	1.92E+01	1.89E+00	7.12E-01	3.92E-01
MW-55-24	016	11/1/2010	14:10	1.39E+03	2.09E+02	1.65E+02	2.58E+03	1.03E+01	1.93E+00	9.92E-01	4.12E-01
MW-55-35	015	11/1/2010	14:26	1.57E+03	2.12E+02	1.62E+02	4.38E+03	1.13E+01	1.97E+00	9.17E-01	6.11E-01
MW-55-54	016	11/1/2010	13:16	8.68E+03	3.95E+02	1.57E+02	1.28E+04	1.93E+01	1.72E+00	6.48E-01	5.28E-01
MW-56-53	009	11/15/2010	12:48	4.64E+02	1.88E+02	3.82E+02	1.19E+03	1.27E+00	8.67E-01	1.86E+00	2.00E+00
MW-56-83	011	11/15/2010	14:27	2.74E+03	2.63E+02	3.84E+02	6.39E+03	1.02E+00	7.08E-01	1.50E+00	5.49E+00
MW-58-26	011	11/11/2010	15:12	3.66E+02	1.73E+02	1.44E+02	1.00E+03	4.13E-01	7.89E-01	8.92E-01	2.00E+00
MW-58-65	011	11/11/2010	13:53	4.81E+02	1.88E+02	1.45E+02	1.00E+03	7.15E-01	7.72E-01	8.31E-01	2.00E+00
MW-60-35	015	11/18/2010	13:25	2.44E+02	1.85E+02	4.00E+02	2.00E+03	-5.73E-01	6.54E-01	1.53E+00	2.00E+00
MW-60-53	015	11/18/2010	12:22	2.49E+02	1.83E+02	3.96E+02	2.00E+03	-4.58E-01	4.20E-01	1.12E+00	2.00E+00
MW-60-72	015	11/16/2010	13:17	-2.51E+01	1.68E+02	3.98E+02	2.00E+03	5.83E-02	5.15E-01	1.13E+00	2.00E+00
MW-60-135	015	11/16/2010	13:22	2.41E+02	1.82E+02	3.96E+02	2.00E+03	-4.96E-02	7.62E-01	1.88E+00	2.00E+00
MW-60-154	015	11/16/2010	13:40	4.68E+02	1.94E+02	3.98E+02	2.00E+03	3.29E-01	8.20E-01	1.94E+00	2.00E+00
MW-60-176	015	11/16/2010	14:06	8.33E+02	2.10E+02	3.97E+02	2.00E+03	9.07E-01	9.42E-01	2.10E+00	2.00E+00
MW-62-18	015	11/9/2010	11:27	7.48E+01	1.71E+02	3.86E+02	2.00E+03	-1.05E-02	6.10E-01	1.14E+00	2.00E+00
MW-62-37	015	11/9/2010	11:56	6.09E+01	1.70E+02	3.85E+02	2.00E+03	7.62E-01	6.69E-01	1.47E+00	2.00E+00
MW-62-53	014	11/9/2010	12:49	2.05E+02	1.77E+02	3.88E+02	2.00E+03	8.32E-02	6.79E-01	1.59E+00	2.00E+00
MW-62-71	015	11/9/2010	11:02	4.17E+02	1.83E+02	3.82E+02	2.00E+03	-6.74E-02	6.02E-01	1.52E+00	2.00E+00
MW-62-92	015	11/9/2010	11:15	4.82E+02	1.88E+02	3.86E+02	2.00E+03	-9.75E-01	7.72E-01	1.95E+00	2.00E+00
MW-62-138	015	11/9/2010	14:11	3.31E+02	2.07E+02	4.46E+02	2.00E+03	-1.05E-01	6.18E-01	1.57E+00	2.00E+00
MW-62-182	015	11/9/2010	14:43	4.76E+02	1.88E+02	3.87E+02	2.00E+03	1.03E+00	6.77E-01	1.46E+00	2.00E+00
MW-63-18	015	11/2/2010	12:22	1.97E+02	1.18E+02	1.13E+02	2.00E+03	1.31E-01	6.87E-01	8.18E-01	2.00E+00
MW-63-34	015	11/2/2010	13:04	3.41E+02	1.35E+02	1.14E+02	2.00E+03	3.11E-01	5.72E-01	6.45E-01	2.00E+00

Cs-137 (pCi/L) Result	Cs-137 Std. Dev.[2]	Cs-137 MDC	Cs-137 I.L.[3]	Co-60 (pCi/L) Result	Co-60 Std. Dev.[2]	Co-60 MDC	Co-60 I.L.[3]	Ni-63 (pCi/L) Result	Ni-63 Std. Dev.[2]	Ni-63 MDC	Ni-63 I.L.[3]	Well ID
-3.68E+00	3.94E+00	7.79E+00	positive	-5.01E+00	5.09E+00	9.47E+00	positive	NA	NA	NA	positive	MW-30-69
-5.07E+00	4.25E+00	6.56E+00	1.79E+01	-5.22E+00	4.66E+00	6.21E+00	positive	NA	NA	NA	positive	MW-30-84
-2.82E+00	8.51E+00	8.97E+00	positive	2.22E+00	8.87E+00	1.05E+01	positive	NA	NA	NA	positive	MW-31-49
-2.24E+00	9.63E+00	1.02E+01	positive	3.44E+00	8.40E+00	1.07E+01	positive	NA	NA	NA	positive	MW-31-63
-1.36E+00	8.88E+00	9.62E+00	positive	-2.66E-01	1.08E+01	1.17E+01	positive	NA	NA	NA	positive	MW-31-85
6.67E+00	7.98E+00	1.03E+01	positive	1.19E+00	9.11E+00	1.05E+01	positive	NA	NA	NA	positive	MW-32-59
5.89E+00	9.60E+00	1.18E+01	positive	-5.55E+00	8.71E+00	7.61E+00	positive	NA	NA	NA	positive	MW-32-85
-1.00E+01	1.08E+01	1.15E+01	positive	3.36E+00	7.71E+00	9.94E+00	positive	NA	NA	NA	positive	MW-32-149
3.87E+00	1.76E+01	9.62E+00	positive	-2.94E+00	9.88E+00	1.01E+01	positive	NA	NA	NA	positive	MW-32-173
2.12E+00	9.02E+00	1.07E+01	positive	-2.40E+00	9.21E+00	9.35E+00	positive	NA	NA	NA	positive	MW-32-190
3.42E+00	9.88E+00	1.17E+01	positive	-1.80E+00	1.16E+01	1.25E+01	positive	NA	NA	NA	positive	MW-36-24
7.62E-01	8.76E+00	1.01E+01	positive	3.09E+00	8.58E+00	1.05E+01	positive	NA	NA	NA	positive	MW-36-41
1.15E-01	5.89E+00	6.52E+00	positive	-2.28E+00	7.92E+00	7.73E+00	positive	NA	NA	NA	positive	MW-36-52
-2.26E+00	7.33E+00	7.68E+00	positive	-1.24E+00	9.31E+00	1.00E+01	positive	NA	NA	NA	positive	MW-37-22
-4.11E+00	7.41E+00	7.07E+00	positive	1.54E+00	7.68E+00	9.04E+00	positive	NA	NA	NA	positive	MW-37-32
2.77E+00	8.58E+00	1.03E+01	positive	-2.01E+00	8.29E+00	8.39E+00	positive	NA	NA	NA	positive	MW-37-40
6.72E+00	1.52E+01	9.04E+00	positive	-3.60E+00	7.95E+00	7.35E+00	positive	NA	NA	NA	positive	MW-37-57
-1.74E+00	3.99E+00	8.40E+00	positive	-3.17E+00	4.38E+00	8.33E+00	positive	NA	NA	NA	positive	MW-39-67
3.58E+00	4.41E+00	1.05E+01	positive	7.47E+00	4.82E+00	1.24E+01	positive	NA	NA	NA	positive	MW-39-84
2.98E+00	3.38E+00	8.21E+00	positive	-4.12E+00	3.52E+00	6.23E+00	positive	NA	NA	NA	positive	MW-39-102
6.40E+00	6.71E+00	1.61E+01	positive	1.31E-01	4.98E+00	1.10E+01	positive	NA	NA	NA	positive	MW-39-124
1.45E+00	4.83E+00	1.10E+01	positive	3.58E+00	4.93E+00	1.14E+01	positive	NA	NA	NA	positive	MW-39-133
-3.21E+00	4.09E+00	6.54E+00	positive	8.70E+00	4.38E+00	1.20E+01	positive	NA	NA	NA	positive	MW-39-195
3.16E-01	3.38E+00	3.76E+00	positive	1.01E+00	3.63E+00	4.13E+00	positive	NA	NA	NA	positive	MW-40-27
5.82E-01	3.82E+00	4.28E+00	positive	2.06E+00	3.99E+00	4.74E+00	positive	NA	NA	NA	positive	MW-40-46
-9.67E-01	4.38E+00	4.79E+00	positive	-4.37E-01	4.83E+00	5.23E+00	positive	NA	NA	NA	positive	MW-40-81
-1.46E-01	4.05E+00	4.53E+00	positive	3.11E-01	4.26E+00	4.81E+00	positive	NA	NA	NA	positive	MW-40-100
-1.53E-01	4.82E+00	5.43E+00	positive	1.12E+00	4.38E+00	5.05E+00	positive	NA	NA	NA	positive	MW-40-127
3.60E-01	4.34E+00	4.91E+00	positive	3.42E-01	4.47E+00	5.03E+00	positive	NA	NA	NA	positive	MW-40-162
3.32E+00	5.63E+00	6.87E+00	positive	1.95E+00	6.74E+00	6.95E+00	positive	NA	NA	NA	positive	MW-41-40
1.06E+00	6.08E+00	7.07E+00	positive	2.87E+00	5.85E+00	7.23E+00	positive	NA	NA	NA	positive	MW-41-63
2.39E+04	2.94E+03	2.93E+01	1.35E+05	-1.67E+00	9.71E+00	1.03E+01	1.05E+01	2.34E+02	2.56E+01	2.10E+01	1.30E+02	MW-42-49
-1.09E+00	8.69E+00	9.51E+00	positive	-5.11E+00	8.41E+00	7.24E+00	positive	-4.24E+00	1.30E+01	2.09E+01	positive	MW-42-78
3.36E+00	5.00E+00	6.09E+00	positive	-5.01E-01	5.43E+00	5.84E+00	positive	NA	NA	NA	positive	MW-43-28
5.94E-01	6.27E+00	6.81E+00	2.36E+01	-6.69E-01	5.31E+00	5.81E+00	positive	NA	NA	NA	positive	MW-43-62
4.23E-01	6.24E+00	7.11E+00	positive	-3.70E+00	7.37E+00	7.27E+00	positive	NA	NA	NA	positive	MW-44-66
-2.73E+00	5.49E+00	5.54E+00	positive	6.85E-01	5.38E+00	6.11E+00	positive	NA	NA	NA	positive	MW-44-102
1.35E+00	6.04E+00	6.99E+00	positive	-1.61E+00	5.70E+00	5.87E+00	positive	NA	NA	NA	positive	MW-45-42
2.92E+00	5.78E+00	5.94E+00	positive	1.19E-01	6.92E+00	7.73E+00	positive	NA	NA	NA	positive	MW-45-61
-2.05E+00	5.85E+00	5.88E+00	positive	2.98E+00	6.81E+00	8.22E+00	positive	NA	NA	NA	positive	MW-46
4.62E+00	4.84E+00	1.15E+01	positive	1.18E+00	3.96E+00	9.11E+00	positive	-1.79E+00	1.32E+01	2.29E+01	positive	MW-49-26
8.48E-01	6.79E+00	9.79E+00	positive	3.75E+00	5.42E+00	1.30E+01	positive	4.00E+00	8.14E+00	1.80E+01	positive	MW-49-42
6.99E+00	6.88E+00	1.07E+01	positive	3.39E-01	5.37E+00	1.13E+01	positive	-3.41E+00	9.31E+00	2.09E+01	positive	MW-49-65
2.40E+00	5.71E+00	6.76E+00	positive	2.73E+00	5.58E+00	6.94E+00	positive	-7.36E+00	1.79E+01	2.15E+01	positive	MW-50-42
-1.39E+00	6.21E+00	6.79E+00	positive	-1.67E+00	6.95E+00	7.30E+00	positive	3.25E-01	1.38E+01	2.18E+01	positive	MW-50-66
1.54E+00	4.28E+00	4.95E+00	positive	1.72E+00	4.17E+00	4.95E+00	positive	NA	NA	NA	positive	MW-51-40
-8.30E-01	4.13E+00	4.54E+00	positive	9.98E-01	4.02E+00	4.65E+00	positive	NA	NA	NA	positive	MW-51-79
1.43E-01	3.99E+00	4.55E+00	positive	2.19E-01	4.56E+00	5.05E+00	positive	NA	NA	NA	positive	MW-51-104
-5.11E-01	4.18E+00	4.61E+00	positive	-2.98E-01	4.20E+00	4.53E+00	positive	NA	NA	NA	positive	MW-51-135
1.23E+00	8.07E+00	4.14E+00	positive	3.30E-01	3.94E+00	4.43E+00	positive	NA	NA	NA	positive	MW-51-163
-7.45E-01	4.51E+00	4.98E+00	positive	-3.16E-01	4.61E+00	5.05E+00	positive	NA	NA	NA	positive	MW-51-189
-3.74E-02	5.82E+00	6.57E+00	1.55E+01	1.14E-01	6.23E+00	7.00E+00	positive	NA	NA	NA	positive	MW-53-82
2.32E+00	5.07E+00	6.00E+00	positive	-9.52E-01	5.46E+00	5.75E+00	positive	NA	NA	NA	positive	MW-53-120
-2.09E+00	5.46E+00	5.80E+00	positive	-6.89E-01	6.35E+00	6.93E+00	positive	-2.56E+00	1.31E+01	2.15E+01	positive	MW-54-37
3.83E+00	6.50E+00	7.88E+00	positive	2.75E+00	6.51E+00	8.01E+00	positive	-3.94E+00	1.36E+01	2.21E+01	positive	MW-54-58
2.19E+00	6.74E+00	7.78E+00	positive	-1.25E+00	6.18E+00	6.62E+00	positive	9.36E+00	1.91E+01	2.15E+01	positive	MW-54-123
1.02E+00	7.82E+00	8.59E+00	positive	3.87E+00	6.48E+00	5.93E+00	positive	2.30E+00	1.91E+01	2.21E+01	positive	MW-54-144
-1.84E+00	7.05E+00	7.31E+00	positive	-1.82E+00	6.23E+00	6.51E+00	positive	2.72E+00	1.84E+01	2.14E+01	positive	MW-54-173
-9.64E-01	6.04E+00	6.61E+00	positive	-2.29E+00	6.71E+00	6.79E+00	positive	-3.18E-01	1.31E+01	2.14E+01	positive	MW-54-190
-2.29E-01	8.10E+00	9.04E+00	2.06E+01	-4.71E+00	7.93E+00	6.54E+00	positive	7.56E+00	1.38E+01	2.12E+01	positive	MW-55-24
-2.41E+00	8.88E+00	9.46E+00	positive	5.36E-01	8.18E+00	9.32E+00	positive	6.32E+00	1.79E+01	2.03E+01	positive	MW-55-35
-3.03E+00	7.29E+00	7.24E+00	positive	9.59E-01	7.50E+00	8.63E+00	positive	1.12E-01	1.77E+01	2.04E+01	positive	MW-55-54
3.71E+00	4.39E+00	1.06E+01	positive	-1.74E+00	4.89E+00	9.95E+00	positive	NA	NA	NA	positive	MW-56-53
-2.51E+00	3.87E+00	7.83E+00	positive	-2.67E+00	3.90E+00	7.34E+00	positive	NA	NA	NA	positive	MW-56-83
1.98E+00	3.81E+00	4.51E+00	positive	2.98E+00	3.75E+00	4.70E+00	positive	NA	NA	NA	positive	MW-58-26
2.61E-01	3.71E+00	4.18E+00	positive	3.74E+00	4.41E+00	5.40E+00	positive	NA	NA	NA	positive	MW-58-65
9.47E-01	4.80E+00	1.08E+01	positive	-4.28E-01	4.56E+00	9.75E+00	positive	-1.11E+01	8.47E+00	1.92E+01	positive	MW-60-35
4.54E-01	4.11E+00	9.15E+00	positive	2.23E+00	3.51E+00	8.75E+00	positive	1.10E+01	8.93E+00	1.96E+01	positive	MW-60-53
2.12E+00	5.34E+00	1.26E+01	positive	-3.92E+00	5.67E+00	1.09E+01	positive	-1.14E-01	8.32E+00	1.89E+01	positive	MW-60-72
9.16E-01	5.37E+00	1.20E+01	positive	1.02E+00	4.53E+00	1.03E+01	positive	8.57E-01	8.52E+00	1.90E+01	positive	MW-60-135
-5.28E+00	4.02E+00	7.52E+00	positive	-2.29E-01	5.09E+00	1.11E+01	positive	-4.54E+00	7.93E+00	1.78E+01	positive	MW-60-154
-1.97E+00	4.38E+00	9.04E+00	positive	2.85E+00	4.70E+00	1.12E+01	positive	-6.40E+00	7.91E+00	1.78E+01	positive	MW-60-176
2.87E+00	4.59E+00	1.07E+01	positive	-6.86E-01	4.79E+00	1.01E+01	positive	NA	NA	NA	positive	MW-62-18
-8.46E-02	4.49E+00	9.91E+00	positive	3.83E+00	4.28E+00	1.07E+01	positive	NA	NA	NA	positive	MW-62-37
-4.23E+00	4.83E+00	9.52E+00	positive	-2.68E+00	5.26E+00	1.04E+01	positive	NA	NA	NA	positive	MW-62-53
-6.58E-01	3.90E+00	8.41E+00	positive	-4.59E+00	5.63E+00	1.09E+01	positive	NA	NA	NA	positive	MW-62-71
-2.96E+00	5.42E+00	1.17E+01	positive	1.77E+00	4.84E+00	1.12E+01	positive	NA	NA	NA	positive	MW-62-92
-1.42E+00	4.04E+00	8.57E+00	positive	2.51E+00	4.68E+00	1.11E+01	positive	NA	NA	NA	positive	MW-62-138
-2.35E+00	4.16E+00	8.56E+00	positive	1.99E+00	5.26E+00	1.21E+01	positive	NA	NA	NA	positive	MW-62-182
1.81E+00	5.46E+00	6.40E+00	positive	3.45E+00	6.55E+00	8.07E+00	positive	NA	NA	NA	positive	MW-63-18
1.10E-01	5.66E+00	6.29E+00	positive	-2.31E+00	6.35E+00	6.51E+00	positive	NA	NA	NA	positive	MW-63-34

I:\17,000-18,999\17869\17869-92 MG\Q4-2010\FINAL\Tables\
Table 4 - 2010 4th Quarter Groundwater Analytical Results.xlsx,
Table 4

See Page 2 of Notes

TABLE 4
2010 4th QUARTER
GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE COLLECTION		ANALYSIS RESULTS																Well ID
				TRITIUM (pCi/L)				Sr-90 (pCi/L)				Cs-137 (pCi/L)				Co-60 (pCi/L)				Ni-63 (pCi/L)				
		Date	Time	Result	Std. Dev.[2]	MDC	LL.[3]	Result	Std. Dev.[2]	MDC	LL.[3]	Result	Std. Dev.[2]	MDC	LL.[3]	Result	Std. Dev.[2]	MDC	LL.[3]	Result	Std. Dev.[2]	MDC	LL.[3]	
MW-63-50	015	11/2/2010	15:17	3.29E+02	1.31E+02	1.12E+02	2.00E+03	2.27E-01	6.23E-01	7.23E-01	2.00E-00	-2.98E-02	7.72E+00	1.42E+01	positive	2.76E+00	8.00E+00	9.73E+10	positive	NA	NA	NA	positive	MW-53-50
MW-63-95	016	11/2/2010	15:18	2.59E+02	1.21E+02	1.11E+02	2.00E+03	3.24E-01	5.72E-01	6.42E-01	2.00E-00	-4.18E-02	4.95E+00	1.04E+01	positive	3.38E+00	5.88E+00	7.11E+10	positive	NA	NA	NA	positive	MW-53-63
MW-63-112	015	11/2/2010	15:15	3.01E+02	1.29E+02	1.12E+02	2.00E+03	6.02E-02	5.22E-01	6.21E-01	2.00E-00	-2.54E+00	6.29E+00	1.30E+01	positive	1.96E+00	6.72E+00	7.93E+10	positive	NA	NA	NA	positive	MW-63-112
MW-63-121	015	11/2/2010	11:16	5.20E+02	1.58E+02	1.18E+02	2.00E+03	6.58E-01	7.25E-01	8.11E-01	2.00E-00	1.17E+00	6.66E+00	1.02E+01	positive	4.07E+00	7.11E+00	8.58E+10	positive	NA	NA	NA	positive	MW-63-121
MW-63-163	015	11/2/2010	11:09	4.44E+02	1.41E+02	1.11E+02	2.00E+03	7.71E-01	8.38E-01	8.77E-01	2.00E-00	-3.99E+00	9.88E+00	1.10E+01	positive	2.04E+00	6.13E+00	7.68E+10	positive	NA	NA	NA	positive	MW-63-163
MW-63-174	015	11/2/2010	11:10	2.67E+02	1.26E+02	1.13E+02	2.00E+03	-1.43E-01	4.79E-01	6.09E-01	2.00E-00	-2.01E-01	6.03E+00	1.82E+01	positive	2.13E-01	6.43E+00	7.11E+10	positive	NA	NA	NA	positive	MW-63-174
MW-66-21	015	11/10/2010	15:13	3.42E+02	1.04E+02	3.46E+02	1.52E+15	2.57E-01	7.49E-01	1.24E+00	2.00E-00	6.04E+00	5.26E+00	1.28E+01	8.00E+01	-1.91E-01	5.61E+00	1.29E+11	positive	9.50E+00	8.45E+00	1.85E+01	positive	MW-66-21
MW-66-36	014	11/10/2010	12:13	3.13E+03	2.96E+02	3.96E+02	7.71E+13	7.43E+00	1.03E+10	1.13E+00	1.36E-01	5.42E+00	3.87E+00	1.67E+01	positive	7.11E-01	4.34E+00	9.81E+10	positive	-4.23E-00	9.53E+00	2.16E+01	positive	MW-66-36
MW-67-39	015	11/10/2010	11:49	3.56E+03	2.09E+02	3.95Z+02	6.52E+13	5.43E+00	8.85E-01	1.10E+00	2.37E-01	1.04E+00	3.96E+00	1.88E+01	positive	2.82E+00	4.38E+00	1.04E+11	positive	-1.86E+00	9.57E+00	2.21E+01	positive	MW-67-39
MW-67-105	014	11/10/2010	11:42	1.14E+03	2.48E+02	3.95Z+02	5.92E+13	1.42E+00	8.12E-01	1.07E+00	2.00E-00	-1.06E+00	3.59E+00	1.64E+01	positive	-3.12E+10	4.14E+00	8.23E+10	positive	1.48E+00	8.36E+00	1.90E+01	positive	MW-67-105
MW-67-173	015	11/10/2010	12:14	9.25E+02	2.01E+02	3.97E+02	1.01E+15	-9.59E-01	9.25E-01	1.20E+00	2.00E-00	4.02E-01	7.80E+00	1.12E+01	2.00E+01	-1.12E+10	4.82E+00	1.03E+11	positive	-1.05E-00	8.39E+00	1.81E+01	1.00E+02	MW-67-173
MW-67-219	014	11/10/2010	13:10	1.15E+03	2.24E+02	3.96Z+02	2.22E+13	3.53E-01	7.28E-01	1.78E+00	2.00E-00	-2.80E-01	5.60E+00	1.62E+01	positive	2.45E-01	3.62E+00	7.83E+10	positive	-4.41E+00	8.54E+00	1.96E+01	positive	MW-67-219
MW-67-276	014	11/10/2010	14:16	1.01E+03	2.13E+02	3.96E+02	2.01E+13	7.35E-01	5.67E-01	1.27E+00	2.00E-00	1.94E+00	4.26E+00	1.92E+01	positive	5.51E+10	4.12E+00	7.91E+10	positive	5.46E+00	8.55E+00	1.95E+01	positive	MW-67-276
MW-67-314	014	11/10/2010	14:14	1.00E+03	1.90E+02	3.94E+02	1.01E+13	1.30E-01	8.12E-01	1.11E+00	2.00E-00	2.70E+00	4.63E+00	1.09E+01	positive	4.11E-01	5.11E+00	1.12E+11	positive	-4.22E+00	7.42E+00	1.70E+01	positive	MW-67-314
MW-67-340	014	11/10/2010	13:13	5.31E+02	1.97E+02	3.95Z+02	1.01E+13	-8.53E-01	5.10E-01	1.14E+00	2.00E-00	1.72E+00	4.50E+00	1.03E+01	positive	-2.97E+10	3.98E+00	7.23E+10	positive	2.25E+00	8.54E+00	1.97E+01	positive	MW-67-340
MW-1-1	035	11/1/2010	14:15	4.59E+04	1.36E+02	1.27Z+02	6.15E+04	3.47E-01	5.10E-01	6.46E-01	3.02E-00	-1.99E-01	5.63E+00	1.38E+01	positive	5.40E+00	5.9_E+00	7.73E+10	positive	NA	NA	NA	positive	MW-1-1
U3-4D	026	10/28/2010	14:14	7.12E+02	1.68E+02	1.12E+02	1.01E+13	2.26E-01	4.99E-01	5.81E-01	2.00E-00	4.75E+00	5.75E+00	1.91E+01	positive	1.33E+00	7.82E+00	9.01E+10	positive	NA	NA	NA	positive	U3-4D
U3-4S	002	10/29/2010	11:40	3.51E+02	1.32E+02	1.10E+02	*	3.81E-01	5.52E-01	6.43E-01	*	1.64E+00	5.59E+00	1.52E+01	"	-2.02E+10	5.9_E+00	6.14E+10	*	NA	NA	NA	*	U3-4S
U3-T1	030	10/29/2010	16:14	3.04E+02	1.28E+02	1.10E+02	1.01E+13	4.84E-02	6.56E-01	7.68E-01	2.00E-00	-8.56E-01	6.04E+00	1.70E+01	positive	1.59E+00	5.73E+00	6.71E+10	positive	NA	NA	NA	positive	U3-T1
U3-1J	025	10/29/2010	11:12	1.47E+03	2.19E+02	1.11E+02	2.01E+15	9.42E-01	0.79E-01	7.56E-01	3.52E-00	-2.11E-02	5.42E+00	1.11E+01	positive	3.08E+00	5.9_E+00	0.87E+10	positive	NA	NA	NA	positive	U3-1J
U1-2SS	015	11/8/2010	14:16	2.26E+03	2.72E+02	1.26E+02	5.17E+13	1.15E+01	1.45E+10	6.94E-01	4.46E-01	2.29E+00	5.01E+00	1.93E+01	positive	2.07E+00	5.6_E+00	0.71E+10	positive	3.10E-01	1.51E+01	2.15E+01	positive	U1-2SS
U1-MCD	009	10/20/2010	13:10	3.34E+03	2.23E+02	1.27Z+02	6.56E+13	3.83E+01	2.31E+10	6.39E-01	5.60E-02	1.20E+04	1.47E+03	1.98E+01	4.32E+01	1.14E+10	4.9_E+00	5.41E+10	positive	2.31E+02	3.19E+01	2.23E+01	5.77E+02	U1-MCD
U1-SPUDS	010	10/20/2010	8:45	4.83E+03	2.59E+02	1.26E+02	1.01E+13	1.17E+01	1.03E+10	8.48E-01	6.01E-01	7.99E+01	7.54E+01	1.45E+01	3.01E+01	-2.11E-01	5.74E+00	5.67E+10	positive	0.71E-01	1.60E+01	2.13E+01	positive	U1-SPUDS
I-2	002	11/17/2010	14:15	1.74E+02	1.71E+02	3.78E+02	*	2.22E-01	6.25E-01	1.50E+00	*	-4.50E-01	5.04E+00	1.10E+01	"	3.35E+00	5.94E+00	1.41E+11	*	NA	NA	NA	*	I-2
MH-5	013	11/24/2010	11:10	4.60E+02	1.86E+02	1.47Z+02	*	1.31E-01	7.57E-01	8.35E-01	*	1.75E+00	3.45E+00	8.02E+01	"	5.41E-01	3.79E+00	4.21E+10	*	NA	NA	NA	*	MH-5
LAF-002	014	11/22/2010	14:41	1.02E+02	1.13E+02	1.21Z+02	positive	1.91E-01	4.62E-01	5.40E-01	positive	-2.13E-01	6.13E+00	1.83E+01	positive	-1.66E+10	5.83E+00	6.13E+10	positive	3.65E+00	1.77E+01	2.05E+01	positive	LAF-002
2-1	010	11/17/2010	11:10	2.57E+03	2.72E+02	1.38E+02	*	9.87E-01	7.69E-01	1.72E+00	*	1.19E+01	6.40E+00	1.93E+01	"	8.31E-01	4.32E+00	9.74E+10	*	NA	NA	NA	*	B-1
B-6	010	11/8/2010	11:45	1.05E+02	1.33E+02	1.43Z+02	*	1.41E-01	6.60E-01	7.68E-01	*	0.00E+00	5.04E+00	1.20E+01	"	-3.20E-01	4.70E+00	5.22E+10	*	NA	NA	NA	*	B-6

Notes

1 For nested multi-level monitoring wells, suffix of well ID indicates depth (rounded to nearest foot) from reference point on casing to bottom of well screen. For Westbay multi-level systems, suffix indicates depth (rounded to nearest foot) from reference point on casing to top of sampling port. Well IDs without a suffix are open bedrock wellbores

2 Sampling depths within sampling intervals (location of pump intake) have been established at locations of most transmissive zone to the extent possible

3 LL's "Investigation Levels" are predetermined detection limits assigned to each sampling location which, if reached or exceeded, require further investigation or action. LL's presented here are established for 2010 based on 2009 averages. Positive detections indicate that the the result is greater than MDC and greater than or equal to 3 times the 1 sigma uncertainty

4 NA indicates that the constituent was not analyzed

5 Dot pattern denotes sampling interval is positioned within overburden soils. Open box indicates sampling interval is in bedrock

6 Shading indicates that the sample result exceeds the Investigation Level

7 Column designated as "Std. Dev." provides the three times 1 sigma uncertainty values

* Investigation Levels have not been determined for samples collected from storm drains or manholes

** Indicates 2010 LL not computed for this well due to absence of 2009 data

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	
MW-3C-69	001	69 3	¢ 4	1/30/2006	15 40	2 37E+05	2 76E+04	6 26E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	MW-30-69
	003	69 3	¢ 4	6/23/2006	10 50	3 92E+05	3 35E+04	6 22E+03	3 34E-02	8 24E-0:	1 09E+00	2 96E+01	1 40E+01	1 14E-01	4 23E-00	9 93E+00	1 14E+01	: 02E+01	: 27E+01	1 36E+01	
	004	69 3	¢ 4	8/18/2006	14 45	2 20E+05	4 20E+03	1 10E+03	8 14E-0:	1 40E+00	1 52E+00	-7 33E+00	1 40E+01	1 41E-01	3 91E-00	1 51E+01	1 78E+01	NA	NA	NA	
	005	69 3	¢ 4	1/29/2006	10 45	1 06E+05	1 86E+03	5 30E+02	2 50E+00	8 40E-0:	8 10E-01	3 13E+00	3 30E+01	5 00E-00	1 23E-00	2 23E+00	2 50E+00	: 15E+01	: 26E+01	1 40E+01	
	006	69 3	¢ 4	1/16/2007	14 05	8 17E+04	8 73E+03	6 34E+02	-1 60E-01	1 47E+00	1 60E+00	0 00E+00	2 10E+00	2 40E-00	-4 30E-01	2 07E+00	2 50E+00	7 07E+00	: 94E+01	2 20E+01	
	007	69 3	¢ 4	6/12/2007	10 20	2 97E+05	8 73E+03	6 34E+02	-2 63E-01	4 19E-0:	6 45E-01	3 93E-01	3 75E+00	4 09E-00	6 68E-02	4 03E+00	3 94E+00	NA	NA	NA	
	008	69 3	¢ 4	7/18/2007	9 55	8 21E+04	2 46E+03	7 70E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	010	69 3	¢ 4	8/1/2007	11 44	1 03E+05	3 09E+03	6 10E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	011	69 3	¢ 4	8/8/2007	10 00	9 96E+04	2 99E+03	6 32E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	012	69 3	¢ 4	8/15/2007	11 00	2 33E+05	6 99E+03	6 33E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	013	69 3	¢ 4	8/21/2007	9 45	1 07E+05	3 21E+03	7 35E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	014	69 3	¢ 4	8/30/2007	11 52	9 80E+04	2 94E+03	7 03E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	015	69 3	¢ 4	9/19/2007	11 00	9 20E+04	2 76E+03	7 32E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	016	69 3	¢ 4	10/23/2007	11 48	1 32E+05	3 90E+03	4 24E+02	2 52E-0:	6 16E-0:	7 12E-01	2 42E+00	5 76E+00	4 45E-00	-5 09E-01	3 65E+00	3 86E+00	NA	NA	NA	
	017	69 3	¢ 4	2/4/2008	13 00	1 87E+05	5 51E+03	3 95E+02	1 57E-0:	6 98E-0:	8 57E-01	1 56E+00	3 65E+00	3 56E-00	-6 00E-01	3 63E+00	3 28E+00	NA	NA	NA	
	018	69 3	¢ 4	5/6/2008	11 00	1 53E+05	3 01E+03	4 26E+02	3 34E-0:	3 98E-0:	6 71E-01	4 94E-01	1 63E+00	3 21E-00	-5 70E-01	1 71E+00	2 73E+00	NA	NA	NA	
	019	69 3	¢ 4	6/6/2008	11 01	7 36E+04	2 02E+03	5 36E+02	2 02E-0:	3 70E-0:	5 99E-01	-9 89E-0:	2 10E+00	3 77E-00	4 91E-01	2 24E+00	3 85E+00	NA	NA	NA	
	020	69 3	¢ 4	8/5/2008	11 22	1 99E+05	3 97E+03	4 35E+02	2 09E-0:	3 77E-0:	5 34E-01	-1 57E-0:	1 42E+00	2 38E-00	1 11E-00	1 23E+00	2 33E+00	NA	NA	NA	
	021	69 3	¢ 4	9/3/2008	11 29	8 53E+04	2 03E+03	5 50E+02	3 12E- 01	5 12E 0:	9 72E 01	1 39E+00	2 22E+00	3 36E-00	NA	NA	NA	NA	NA	NA	
	022	69 3	¢ 4	11/7/2008	10 27	9 55E+04	2 05E+03	3 06E+02	4 09E-0:	5 53E-0:	6 31E-01	7 03E-01	3 09E+00	3 66E 00	-1 07E-01	2 65E+00	2 05E+00	NA	NA	NA	
	023	69 3	¢ 4	1/30/2009	11 00	1 07E+05	2 51E+03	1 98E+02	-8 74E-02	7 38E-0:	9 73E-01	-1 13E+00	2 61E+00	2 66E-00	1 05E-00	2 73E+00	3 24E+00	NA	NA	NA	
	024	69 3	¢ 4	4/27/2009	10 27	1 00E+05	3 65E+03	4 22E+02	-1 54E-01	4 88E-0:	6 31E-01	1 49E+00	1 11E+00	4 74E-00	-2 78E-01	4 12E+00	4 60E+00	NA	NA	NA	
	025	69 3	¢ 4	6/1/2009	12 02	8 20E+04	3 21E+03	3 77E+02	3 12E-0:	5 53E-0:	6 32E-01	2 16E+00	9 60E+00	6 53E-00	8 26E-01	5 47E+00	7 42E+00	NA	NA	NA	
	026	69 3	¢ 4	8/6/2009	12 16	1 64E+05	4 77E+03	2 96E+02	6 79E-02	6 10E-0:	7 41E-01	-2 09E+00	8 52E+00	7 30E-00	-2 67E+00	9 44E+00	9 70E+00	NA	NA	NA	
	027	69 3	¢ 4	9/12/2009	10 45	9 91E+04	2 91E+03	2 57E+02	-3 43E-02	6 45E-0:	8 50E-01	-9 52E-0:	5 52E+00	6 11E-00	4 45E-00	5 13E+00	7 88E+00	NA	NA	NA	
	028	69 3	¢ 4	11/9/2009	11 21	9 01E+04	2 63E+03	1 78E+02	-4 26E-01	6 53E-0:	8 14E-01	-1 37E-0:	5 47E+00	6 20E-00	-2 47E-01	5 03E+00	6 76E+00	NA	NA	NA	
	029	69 3	¢ 4	1/27/2010	11 30	1 25E+05	3 99E+03	6 15E+02	3 42E-02	7 18E-0:	8 33E-01	-3 23E-0:	3 36E+00	3 68E-00	2 05E-01	3 17E+00	3 57E+00	NA	NA	NA	
	030	69 3	¢ 4	2/24/2010	12 35	1 36E+05	2 01E+03	2 35E+02	-7 42E-02	3 54E-0:	5 30E-01	6 84E-01	3 79E+00	4 26E-00	-1 38E+00	3 65E+00	3 73E+00	NA	NA	NA	
	031	69 3	¢ 4	4/29/2010	12 55	1 61E+05	4 67E+03	2 78E+02	-1 31E-01	7 56E-0:	9 40E-01	-2 29E+00	5 33E+00	5 59E-00	2 05E-00	5 37E+00	6 58E+00	NA	NA	NA	
	032	69 3	¢ 4	6/3/2010	12 32	1 52E105	4 49E103	4 30E102	2 56E-0:	4 79E-0:	5 40E-01	-1 20E100	6 55E100	7 22E 00	-1 72E-01	5 43E100	5 29E100	NA	NA	NA	
	033	69 3	¢ 4	7/28/2010	12 33	1 28E+05	3 72E+03	1 80E+02	9 14E-02	5 26E-0:	6 35E-01	-5 30E-0:	9 69E+00	1 09E-01	1 67E-00	7 43E+00	9 20E+00	NA	NA	NA	
	034	69 3	¢ 4	8/20/2010	15 06	1 11E+05	3 24E+03	2 22E+02	3 53E-0:	7 80E-0:	9 30E-01	-3 14E+00	5 22E+00	5 12E-00	-2 41E+00	5 23E+00	5 03E+00	NA	NA	NA	
	035	69 3	¢ 4	9/8/2010	12 35	1 23E+05	3 65E+03	4 47E+02	1 93E-0:	4 41E-0:	5 14E-01	-1 10E+00	4 42E+00	4 87E-00	1 40E-00	4 72E+00	5 73E+00	NA	NA	NA	
	036	69 3	¢ 4	11/5/2010	11 56	1 25E+05	1 88E+03	4 34E+02	9 69E-0:	8 79E-0:	1 94E+00	-3 68E+00	3 54E+00	7 79E-00	-5 01E+00	5 02E+00	9 47E+00	NA	NA	NA	
MW-3C-84	001	83 8	-8 1	8/22/2006	13 15	1 25E+04	2 43E+03	1 51E+03	-1 60E-01	9 82E-0:	1 13E+00	1 88E+00	1 09E+01	1 24E-01	-2 52E+00	1 03E+01	1 03E+01	NA	NA	NA	MW-30-84
	002	83 8	-8 1	1/29/2006	14 30	1 01E+04	1 59E+03	1 10E+03	-9 40E-01	7 80E-0:	8 70E-01	2 94E+02	1 68E+01	5 00E-00	-3 00E-01	3 93E+00	4 80E+00	4 10E+00	: 17E+01	1 30E+01	
	003	83 8	-8 1	1/17/2007	9 45	7 33E+03	7 50E+02	5 30E+02	4 80E-0:	1 50E+00	1 60E+00	1 18E+00	2 61E+00	2 90E-00	0 00E-00	2 91E+00	3 40E+00	NA	NA	NA	
	004	83 8	-8 1	6/12/2007	10 19	7 79E+03	9 47E+02	4 42E+02	-1 49E-01	4 44E-0:	6 41E-01	-1 06E+00	2 29E+00	2 41E-00	-6 93E-01	2 33E+00	2 54E+00	-3 57E+00	: 74E+01	2 03E+01	
	005	83 8	-8 1	7/18/2007	10 25	4 80E+03	7 20E+02	7 30E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	006	83 8	8 1	7/25/2007	13 00	5 02E+03	4 49E+02	2 43E+02	1 56E 0:	3 29E 0:	3 98E 01	2 83E+00	3 88E+00	2 84E-00	2 03E-00	2 91E+00	3 57E+00	NA	NA	NA	
	007	83 8	-8 1	10/23/2007	12 49	4 27E103	7 30E102	4 03E102	5 95E-0:	5 53E-0:	5 59E-01	1 56E100	2 61E100	3 30E 00	-1 17E100	3 72E100	3 27E100	NA	NA	NA	
	008	83 8	-8 1	2/4/2008	14 16	4 34E+03	2 61E+02	1 32E+02	-4 06E-01	4 55E-0:	7 47E-01	-1 00E+00	2 55E+00	2 73E-00	-4 32E-01	2 97E+00	2 79E+00	NA	NA	NA	
	009	83 8	-8 1	5/6/2008	13 40	4 18E+03	2 83E+02	2 20E+02	3 26E-0:	3 96E-0:	6 51E-01	4 43E-01	2 51E+00	4 00E-00	-1 51E+00	2 53E+00	3 69E+00	NA	NA	NA	
	010	83 8	-8 1	6/6/2008	12 10	3 85E+03	5 33E+02	5 04E+02	1 54E-0:	2 46E-0:	4 34E-01	-8 97E-0:	2 16E+00	3 57E-00	2 05E-00	2 31E+00	4 29E+00	NA	NA	NA	
	020	83 8	-8 1	8/5/2008	14 40	4 31E+03	2 28E+02	1 94E+02	2 77E-0:	2 86E-0:	4 57E-01	-1 87E-0:	1 44E+00	2 35E-00	-1 04E-01	2 12E+00	2 66E+00	NA	NA	NA	
	021	83 8	-8 1	9/3/2008	11 59	3 78E+03	5 13E+02	5 35E+02	-4 62E-02	4 51E-0:	9 36E-01	-3 32E-0:	1 73E+00	2 89E-02	NA	NA	NA	NA	NA	NA	
	013	83 8	-8 1	11/7/2008	10 50	5 25E+03	3 23E+02	1 54E+02	1 07E-02	5 75E-0:	7 51E-01	6 64E-01	4 63E+00	5 37E-00	2 13E-00	5 34E+00	6 53E+00	NA	NA	NA	
	014	83 8	-8 1	1/30/2009	11 21	4 69E+03	5 43E+02	1 99E+02	9 38E-02	5 97E-0:	7 19E-01	8 97E+00	4 54E+00	3 02E-00	-8 43E-02	3 32E+00	3 81E+00	NA	NA	NA	
	015	83 8	-8 1	4/27/2009	14 30	5 34E+03	9 08E+02	4 11E+02	-1 19E-01	4 70E-0:	6 79E-01	1 13E+00	6 54E+00	4 36E-00	1 33E-00	3 77E+00	4 50E+00	NA	NA	NA	
	016	83 8	8 1	6/1/2009	13 25	5 83E+03	9 02E+02	3 76E+02	1 34E 0:	7 19E 0:	8 22E 01	3 90E 01	1 61E+01	6 75E-00	8 79E 02	5 05E+00	6 80E+00	NA	NA	NA	
	017	83 8	-8 1	8/6/2009	12 30	7 76E103	5 03E102	1 50E102	6 00E-02	7 47E-0:	9 19E-01	1 50E100	4 42E100	5 65E 00	-5 55E100	5 12E100	4 95E100	NA	NA	NA	
	018	83 8	-8 1	9/12/2009	12 22	6 75E+03	3 89E+02	1 53E+02	-6 42E-02	7 28E-0:	8 91E-01	1 76E+00	9 09E+00	5 02E-00	-7 70E-01	5 23E+00	5 82E+00	NA	NA	NA	
	019	83 8	-8 1	11/9/2009	12 27	6 21E+03	3 56E+02	9 70E+01	8 84E-02	7 55E-0:	8 42E-01	2 06E-01	5 52E+00	6 74E-00	-3 17E+00	5 53E+00	4 98E+00	NA	NA	NA	
	020	83 8	-8 1	1/27/2010	12 15	6 60E+03	1 07E+03	6 37E+02	-1 64E-01	2 43E-0:	4 02E-01	3 95E-01	3 66E+00	3 41E-00	-8 46E-01	3 03E+00	3 19E+00	NA	NA	NA	
	021	83 8	-8 1	2/24/2010	12 44	6 94E+03	3 63E+02	1 58E+02	1 30E-0:	4 23E-0:	5 36E-01	1 17E+00	4 58E+00	5 35E-00	9 09E-01	4 74E+00	5 54E+00	NA	NA	NA	
	022	83 8	-8 1	4/29/2010	13 46	9 56E+03	5 40E+02	1 48E+02	4 08E-0:	8 33E-0:	9 56E-01	-3 84E-0:	5 71E+00	6 36E-00	2 19E-00	5 36E+00	6 57E+00	NA	NA	NA	
	023	83 8	-8 1	6/8/2010	12 19	9 40E+03	4 37E+02	2 14E+02	2 01E-0:	4 85E-0:	5 52E-01	7 20E-01	5 49E+00	6 21E-00	-4 01E+00	5 33E+00	6 10E+00	NA	NA	NA	
	024	83 8	-8 1	7/28/2010	13 07	9 26E+03	5 09E+02	1 01E+02	4 48E-0:	7 53E-0:	8 52E-01	-1 46E+00	9 30E+00	1 02E-01	-3 03E-01	9 77E+00	1 08E+01	NA	NA	NA	
	025	83 8	-8 1	8/20/2010	16 51	1 00E+04	5 57E+02	1 29E+02	5 65E-0:	8 70E-0:	9 33E-01	3 22E+00	6 27E+00	7 54E-00	-3 57E+00	5 69E+00	6 20E+00	NA	NA	NA	
	026	83 8	-8 1	9/9/2010	13 14	1 01E+04	4 32E+02	2 10E+02	3 19E-0:	6 20E-0:	7 35E-01	-1 48E+00	6 18E+00	6 74E-00	-4 19E-01	7 63E+00	8 58E+00	NA	NA	NA	
	027	83 8	8 1	11/5/2010	12 35	1 02E+04	4 80E+02	3 87E+02	5 25E 0:	7 56E 0:	1 70E+00	3 07E+00	4 33E+00	8 38E-00	5 32E+00	4 88E+00	3 20E+00	NA	NA	NA	
MW-31-45	001	43 0	26 0	1/27/2006	11 45	2 93E102	1 74E102	1 70E102	0 00E100	1 29E100	1 40E100	NA	NA	NA	1 33E 00	3 63E100	4 00E100	: 42E102	: 65E102	1 90E102	MW-31-49
	002	48 8	26 8	1/18/2007	9 13	1 20E+03	5 70E+02	5 30E+02	3 00E-0:	1 62E+00	1 80E+00	NA	NA	NA	-2 10E+00	8 13E+00	9 50E+00	NA	NA	NA	
MW-31-45	003	48 8	26 8	6/12/2007	14 24	1 48E+03	5 24E+02	4 87E+02	-1 51E-01	5 49E-0:	7 52E-01	1 85E-01	2 12E+00	2 35E-00	1 26E-01	2 01E+00	2 26E+00	0 00E+00	: 11E+01	1 29E+01	

See Page 32 for Notes

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	
MW-31-49	004	48 8	26 8	8/2/2007	10 23	1 19E+04	1 27E+03	5 43E+02	-5 17E-01	7 89E-01	9 55E-01	8 83E+01	1 35E+01	3 31E-00	1 80E-01	3 63E+00	4 11E+00	NA	NA	NA	MW-31-49
	005	48 8	26 8	9/11/2007	13 10	6 98E+03	3 27E+02	1 59E+02	-2 26E-01	4 23E-01	6 31E-01	-1 20E+00	3 64E+00	3 24E-00	0 00E-00	4 95E+00	4 75E+00	NA	NA	NA	
	006	48 8	26 8	10/24/2007	15 50	8 77E+03	9 99E+02	4 30E+02	5 14E-02	4 26E-01	5 36E-01	-6 76E-01	3 54E+00	3 57E-00	1 35E-00	3 21E+00	3 52E+00	NA	NA	NA	
	007	48 8	26 8	1/16/2008	10 31	3 97E+02	1 94E+02	1 77E+02	-9 14E-02	6 86E-01	8 97E-01	-1 17E+00	4 74E+00	5 07E-00	-9 76E-01	4 41E+00	4 65E+00	NA	NA	NA	
	009	48 8	26 8	6/6/2008	15 05	3 04E+04	1 34E+03	4 59E+02	2 83E-01	3 39E-01	5 72E-01	1 11E+00	1 53E+00	3 47E-00	1 72E-00	2 01E+00	3 82E+00	NA	NA	NA	
	010	48 8	26 8	8/7/2008	17 43	5 94E+03	1 33E+03	1 93E+02	2 39E-01	2 57E-01	4 47E-01	7 07E-01	1 30E+00	2 23E-00	7 08E-01	1 47E+00	2 56E+00	NA	NA	NA	
	011	48 8	26 8	8/30/2008	11 55	1 36E+04	9 61E+02	5 53E+02	4 16E 01	4 80E 01	8 36E 01	1 27E+00	3 63E+00	3 09E-00	NA	NA	NA	NA	NA	NA	
	012	48 8	26 8	10/30/2008	11 30	6 43E+02	2 25E+02	1 71E+02	7 64E-02	1 71E-01	1 93E-01	1 29E+00	6 67E+00	7 25E 00	-9 09E-01	5 42E+00	6 88E+00	NA	NA	NA	
	013	48 8	26 8	1/18/2008	11 15	7 77E+02	1 79E+02	1 52E+02	4 11E-01	6 30E-01	6 97E-01	1 21E+00	4 18E+00	5 03E-00	9 78E-01	4 93E+00	5 84E+00	NA	NA	NA	
	014	48 8	26 8	2/6/2009	11 05	1 11E+04	7 86E+02	1 99E+02	1 18E-01	3 30E-01	3 57E-01	-1 57E-01	2 57E+00	3 52E-00	-4 61E-01	2 85E+00	3 14E+00	NA	NA	NA	
	015	48 8	26 8	4/14/2009	10 36	4 84E+04	1 42E+03	1 56E+02	4 05E-01	5 53E-01	5 97E-01	-5 81E-01	6 18E+00	4 12E-00	1 44E+00	3 90E+00	4 67E+00	NA	NA	NA	
	016	48 8	26 8	5/29/2009	11 42	9 34E+03	1 12E+03	3 77E+02	5 72E-01	5 75E-01	6 24E-01	-7 86E-01	9 50E+00	6 33E-00	-1 48E+00	5 63E+00	7 11E+00	NA	NA	NA	
	017	48 8	26 8	7/21/2009	11 53	7 36E+02	2 61E+02	2 27E+02	1 91E-01	5 31E-01	5 96E-01	-1 36E+00	3 38E+00	3 60E-00	1 04E+00	3 92E+00	4 66E+00	NA	NA	NA	
	019	48 8	26 8	9/14/2009	11 13	3 14E+04	9 35E+02	1 70E+02	-3 21E-02	7 29E-01	9 36E-01	-1 97E+00	5 31E+00	5 51E-00	3 23E-00	4 71E+00	6 12E+00	NA	NA	NA	
	020	48 8	26 8	10/22/2009	12 58	4 58E+04	8 63E+02	1 53E+02	5 63E-01	8 72E-01	9 57E-01	2 29E-01	6 17E+00	6 84E-00	-4 70E-01	5 15E+00	6 61E+00	NA	NA	NA	
	021	48 8	26 8	1/26/2010	12 07	4 46E+04	1 35E+03	1 12E+02	1 08E-01	7 49E-01	9 35E-01	-4 18E-01	5 33E+00	4 07E-00	-1 54E+00	3 84E+00	3 99E+00	NA	NA	NA	
	022	48 8	26 8	3/5/2010	11 30	4 89E+02	1 71E+02	1 59E+02	1 47E-02	3 51E-01	4 50E-01	-4 53E-01	4 53E+00	5 10E-00	1 18E-00	4 03E+00	5 71E+00	NA	NA	NA	
	023	48 8	26 8	4/14/2010	10 42	1 16E+04	3 90E+02	1 00E+02	1 18E 01	4 62E 01	5 72E 01	2 95E+00	8 54E+00	9 00E-00	9 25E 03	8 91E+00	9 95E+00	NA	NA	NA	
	024	48 8	26 8	6/7/2010	11 30	1 73E+04	5 79E+02	2 22E+02	3 41E-01	7 95E-01	9 18E-01	-3 30E+00	7 42E+00	7 51E-00	1 82E-00	6 72E+00	8 03E+00	NA	NA	NA	
	025	48 8	26 8	7/27/2010	14 43	5 46E+04	1 59E+03	1 21E+02	3 05E-01	4 71E-01	5 22E-01	2 74E+00	1 17E+01	1 40E-01	2 23E-00	8 03E+00	9 96E+00	NA	NA	NA	
	026	48 8	26 8	8/23/2010	12 11	4 11E+03	3 56E+02	1 23E+02	1 62E-01	7 89E-01	9 57E-01	-1 21E+00	5 42E+00	5 91E-00	-3 35E-02	5 12E+00	5 80E+00	NA	NA	NA	
	027	48 8	26 8	9/7/2010	13 49	1 04E+05	3 02E+03	1 58E+02	-1 15E-01	2 82E-01	4 23E-01	3 35E+00	5 52E+00	6 68E-00	2 15E-00	5 97E+00	7 20E+00	NA	NA	NA	
	028	48 8	26 8	11/3/2010	11 55	3 35E+04	9 81E+02	1 15E+02	-3 04E-02	4 26E-01	5 51E-01	-2 82E+00	8 51E+00	8 97E-00	2 22E-00	8 87E+00	1 06E+01	NA	NA	NA	
MW-31-63	001	63 3	12 3	1/27/2006	12 10	6 89E+03	1 44E+03	1 10E+03	5 30E-01	1 56E+00	1 40E+00	1 99E+02	9 60E+00	3 60E-00	6 80E-01	2 94E+00	3 40E+00	4 10E+01	1 17E+02	1 30E+02	MW-31-63
	002	63 3	12 3	1/18/2007	9 25	1 41E+04	9 00E+02	5 20E+02	-6 50E-01	1 50E+00	1 70E+00	-4 30E-01	3 00E+00	3 50E-00	-4 50E-01	2 91E+00	3 50E+00	NA	NA	NA	
	003	63 3	12 3	6/12/2007	14 20	5 00E+03	7 85E+02	4 38E+02	4 72E-01	6 36E-01	6 78E-01	-5 31E-01	1 52E+00	2 09E-00	-8 78E-02	1 97E+00	2 20E+00	3 37E+00	1 89E+01	2 17E+01	
	004	63 3	12 3	8/2/2007	11 15	4 06E+04	2 27E+03	5 53E+02	-1 41E-01	7 84E-01	9 53E-01	1 50E+00	3 76E+00	4 18E-00	-3 09E-02	4 41E+00	4 23E+00	NA	NA	NA	
	005	63 3	12 3	9/11/2007	13 25	3 77E+04	1 13E+03	2 20E+02	1 37E 01	4 52E 01	6 15E 01	4 39E 01	3 51E+00	3 80E-00	8 64E 01	3 92E+00	3 41E+00	NA	NA	NA	
	006	63 3	12 3	10/24/2007	14 55	3 50E+04	1 94E+03	4 30E+02	-1 63E-01	4 50E-01	6 34E-01	1 07E+00	5 21E+00	4 01E 00	1 01E 00	3 43E+00	4 11E+00	NA	NA	NA	
	007	63 3	12 3	1/16/2008	11 32	1 24E+04	7 35E+02	1 80E+02	-6 88E-02	5 34E-01	7 44E-01	-2 49E-01	4 64E+00	4 40E-00	-9 08E-01	4 12E+00	4 32E+00	NA	NA	NA	
	009	63 3	12 3	6/6/2008	16 16	1 02E+04	7 92E+02	5 34E+02	1 44E-01	3 40E-01	6 17E-01	-1 15E+00	2 11E+00	3 36E-00	2 47E-00	2 31E+00	3 43E+00	NA	NA	NA	
	010	63 3	12 3	8/7/2008	11 22	1 76E+04	4 17E+02	1 94E+02	-2 12E-01	2 51E-01	5 39E-01	-1 86E-01	1 28E+00	2 16E-00	3 73E-01	1 43E+00	2 49E+00	NA	NA	NA	
	011	63 3	12 3	8/30/2008	12 34	2 21E+04	1 07E+03	5 49E+02	-6 34E-01	4 35E-01	9 79E-01	3 76E-01	2 35E+00	4 04E-00	NA	NA	NA	NA	NA	NA	
	012	63 3	12 3	10/30/2008	12 14	2 30E+04	1 08E+03	1 73E+02	2 28E-01	2 33E-01	2 52E-01	2 21E+00	6 18E+00	7 37E-00	-1 47E+00	7 25E+00	7 77E+00	NA	NA	NA	
	013	63 3	12 3	1/18/2008	11 58	2 55E+04	8 07E+02	1 84E+02	3 95E-01	7 40E-01	8 36E-01	1 02E-02	5 69E+00	6 01E-00	-5 18E-01	5 54E+00	6 97E+00	NA	NA	NA	
	014	63 3	12 3	2/6/2009	11 53	1 28E+04	8 39E+02	1 97E+02	6 43E-01	6 42E-01	6 82E-01	-1 32E+00	3 42E+00	3 63E-00	-7 48E-01	3 85E+00	4 17E+00	NA	NA	NA	
	015	63 3	12 3	4/14/2009	12 07	3 24E+04	1 10E+03	1 48E+02	2 95E-01	6 81E-01	7 75E-01	1 76E+00	6 68E+00	4 45E-00	2 23E-00	3 87E+00	4 79E+00	NA	NA	NA	
	016	63 3	12 3	5/29/2009	12 34	3 16E+04	9 51E+02	1 95E+02	5 59E-01	5 58E-01	6 37E-01	1 79E+00	1 07E+01	7 12E-00	7 44E-01	5 45E+00	7 35E+00	NA	NA	NA	
	017	63 3	12 3	7/21/2009	12 50	1 45E+04	6 20E+02	2 31E+02	1 95E-01	7 52E-01	9 11E-01	3 40E-01	3 50E+00	4 37E 00	-1 56E+00	3 03E+00	3 75E+00	NA	NA	NA	
	018	63 3	12 3	9/1/2009	10 50	1 41E+04	5 09E+02	2 13E+02	1 51E-01	3 55E-01	4 13E-01	-1 30E+00	6 76E+00	6 17E 00	6 92E-01	5 01E+00	5 74E+00	NA	NA	NA	
	019	63 3	12 3	9/14/2009	12 45	1 41E+04	5 48E+02	1 55E+02	8 11E-01	8 72E-01	9 25E-01	-1 96E+00	4 75E+00	5 05E-00	-1 40E+00	5 87E+00	6 29E+00	NA	NA	NA	
	020	63 3	12 3	10/22/2009	13 20	2 00E+04	8 85E+02	1 57E+02	1 10E+00	1 45E-01	1 51E-01	1 92E-01	5 52E+00	6 75E-00	2 27E-00	5 42E+00	7 19E+00	NA	NA	NA	
	021	63 3	12 3	1/26/2010	13 08	3 36E+04	2 21E+03	6 56E+02	5 46E-01	8 55E-01	9 50E-01	1 63E+00	3 12E+00	3 68E-00	-1 56E+00	3 35E+00	3 52E+00	NA	NA	NA	
	022	63 3	12 3	3/5/2010	12 17	7 35E+04	1 11E+03	1 72E+02	1 20E-01	3 38E-01	4 02E-01	2 57E+00	4 49E+00	5 38E-00	-3 55E+00	4 62E+00	4 24E+00	NA	NA	NA	
	023	63 3	12 3	4/14/2010	13 05	1 84E+04	5 46E+02	1 38E+02	-1 50E-01	4 43E-01	6 51E-01	-4 58E+00	9 18E+00	9 12E-00	2 75E-01	9 97E+00	1 12E+01	NA	NA	NA	
	024	63 3	12 3	6/7/2010	12 19	5 11E+04	1 53E+03	2 93E+02	3 68E-01	8 34E-01	9 11E-01	2 95E+00	5 54E+00	7 20E-00	9 47E-01	5 12E+00	7 09E+00	NA	NA	NA	
	025	63 3	12 3	7/27/2010	15 54	6 17E+04	1 80E+03	1 27E+02	5 31E-01	6 45E-01	6 39E-01	-1 31E+00	8 27E+00	8 91E-00	1 22E-00	7 38E+00	8 70E+00	NA	NA	NA	
	026	63 3	12 3	8/23/2010	13 11	6 69E+04	1 95E+03	1 50E+02	4 60E-01	7 52E-01	8 40E-01	1 17E+00	6 11E+00	7 13E-00	-1 47E+00	5 17E+00	6 44E+00	NA	NA	NA	
	027	63 3	12 3	9/7/2010	15 28	4 65E+04	1 41E+03	1 16E+02	3 99E 01	7 26E 01	8 18E 01	4 05E 01	4 75E+00	5 31E-00	1 47E+00	5 45E+00	5 56E+00	NA	NA	NA	
	028	63 3	12 3	11/3/2010	12 32	2 95E+04	9 02E+02	1 14E+02	3 31E-01	6 30E-01	7 13E-01	-2 24E+00	9 03E+00	1 02E 01	3 44E 00	3 42E+00	1 07E+01	NA	NA	NA	
MW-31-85	001	84 8	-9 2	1/27/2006	12 20	4 62E+02	1 74E+02	1 70E+02	1 50E-01	1 44E+00	1 60E+00	1 22E+02	8 40E+00	3 20E-00	2 10E-01	2 12E+00	2 50E+00	2 20E+01	9 30E+01	1 00E+02	MW-31-85
	002	84 8	-9 2	1/18/2007	9 16	2 66E+03	6 00E+02	5 20E+02	-5 90E-01	1 39E+00	1 80E+00	-4 90E+00	8 40E+00	1 00E-01	-6 00E-01	8 70E+00	1 00E+01	8 30E+00	2 11E+01	2 89E+01	
	003	84 8	-9 2	6/12/2007	14 05	3 17E+02	1 62E+02	1 59E+02	-3 83E-01	6 52E-01	9 31E-01	3 95E-01	2 76E+00	1 91E-00	-5 71E-01	1 62E+00	1 83E+00	NA	NA	NA	
	004	84 8	-9 2	8/2/2007	10 58	2 69E+03	7 11E+02	5 31E+02	-7 29E-01	6 31E-01	9 31E-01	-5 21E-02	3 29E+00	3 59E-00	-1 50E+00	3 35E+00	3 31E+00	NA	NA	NA	
	005	84 8	-9 2	9/11/2007	13 20	4 32E+03	3 32E+02	1 82E+02	6 06E-01	7 48E-01	7 93E-01	-7 34E-01	3 64E+00	3 26E-00	-3 67E+00	3 63E+00	3 24E+00	NA	NA	NA	
	006	84 8	-9 2	10/24/2007	14 40	5 51E+03	8 15E+02	3 98E+02	2 53E-01	4 08E-01	4 51E-01	5 68E-01	2 50E+00	3 38E-00	4 76E-01	2 75E+00	3 19E+00	NA	NA	NA	
	007	84 8	-9 2	1/16/2008	11 26	1 31E+03	2 81E+02	1 84E+02	6 97E-01	7 57E-01	7 79E-01	2 68E+00	4 65E+00	4 83E-00	1 90E-00	3 83E+00	4 62E+00	NA	NA	NA	
	009	84 8	-9 2	6/6/2008	15 26	5 95E+03	6 30E+02	5 35E+02	1 92E-01	3 17E-01	5 59E-01	-8 37E-01	2 30E+00	3 45E-00	1 91E-00	2 45E+00	4 58E+00	NA	NA	NA	
	010	84 8	-9 2	8/7/2008	11 13	2 30E+03	1 83E+02	1 94E+02	1 07E-01	2 87E-01	5 30E-01	-6 47E-01	1 22E+00	1 94E-00	1 63E-02	1 31E+00	2 18E+00	NA	NA	NA	
	011	84 8	-9 2	8/30/2008	12 09	8 34E+03	7 00E+02	5 52E+02	4 46E 01	4 87E 01	8 10E 01	5 50E 01	1 86E+00	3 07E-00	NA	NA	NA	NA	NA	NA	
	012	84 8	-9 2	10/30/2008	12 09	3 89E+03	4 52E+02	1 57E+02	4 08E-01	7 33E-01	8 25E-01	-5 03E+00	6 17E+00	4 73E-00	-4 82E+00	5 99E+00	6 56E+00	NA	NA	NA	
	013	84 8	-9 2	1/18/2008	12 00	4 41E+03	2 97E+02	1 51E+02	-2 44E-01	5 37E-01	8 11E-01	2 13E+00	3 79E+00	4 76E-00	2 84E+00	3 82E+00	3 19E+00	NA	NA	NA	
	014	84 8	-9 2	2/6/2009	11 22	7 37E+03	6 54E+02	2 22E+02	3 89E-01	5 58E-01	6 16E-01	1 22E+00	5 50E+00	4 06E-00	1 04E+00	5 57E+00	4 23E+00	NA	NA	NA	
	015	84 8	-9 2	4/14/2009	11 41	1 88E+04	8 49E+02	1 50E+02	5 35E-01	7 01E-01	7 54E-01	-6 49E-01	5 24E+00	3 49E-00	1 11E-00	3 52E+00	4 14E+00	NA	NA	NA	

See Page 32 for Notes

IPEC00266270

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	
MW-31-85	016	84.8	-9.2	5/29/2009	12:50	8.85E+03	1.09E+03	3.75E+02	1.04E-01	8.31E-01	9.30E-01	8.20E-01	1.04E+01	6.95E-00	6.97E-01	5.57E+00	7.51E+00	NA	NA	NA	MW-31-85
	017	84.8	-9.2	7/21/2009	12:13	2.96E+03	4.10E+02	2.29E+02	-2.28E-01	5.51E-01	8.38E-01	-2.54E+00	5.04E+00	4.22E-00	2.25E-00	3.71E+00	4.75E+00	NA	NA	NA	
	018	84.8	-9.2	9/1/2009	10:52	3.52E+03	3.00E+02	2.12E+02	4.12E-01	6.15E-01	6.31E-01	-8.48E-01	4.46E+00	4.89E-00	-5.30E-03	5.12E+00	6.86E+00	NA	NA	NA	
	019	84.8	-9.2	9/14/2009	12:05	5.14E+03	3.48E+02	1.56E+02	-4.43E-01	4.92E-01	8.14E-01	-1.58E-01	4.56E+00	5.62E-00	-2.91E-01	5.13E+00	5.72E+00	NA	NA	NA	
	020	84.8	-9.2	10/22/2009	12:54	4.50E+03	3.06E+02	1.57E+02	5.53E-01	6.57E-01	7.18E-01	3.27E-01	6.72E+00	6.89E-00	1.12E-00	5.11E+00	7.07E+00	NA	NA	NA	
	021	84.8	-9.2	1/26/2010	17:08	7.25E+04	1.83E+03	6.54E+02	-3.53E-01	7.18E-01	9.43E-01	5.22E-01	2.56E+00	3.33E-00	1.51E-00	2.95E+00	3.49E+00	NA	NA	NA	
	022	84.8	-9.2	3/5/2010	11:49	3.69E+03	2.52E+02	1.58E+02	1.39E-01	3.31E-01	3.38E-01	1.93E+00	4.34E+00	5.05E-00	1.40E-01	5.13E+00	6.84E+00	NA	NA	NA	
	023	84.8	-9.2	4/14/2010	12:09	4.05E+03	2.60E+02	2.29E+01	-1.42E-01	4.23E-01	6.36E-01	3.84E+00	6.50E+00	0.60E-00	1.40E-01	5.13E+00	6.84E+00	NA	NA	NA	
	024	84.8	-9.2	6/7/2010	12:00	9.34E+03	4.35E+02	2.13E+02	3.29E-01	5.73E-01	6.43E-01	2.20E+00	4.86E+00	5.78E-00	-1.67E+00	4.73E+00	4.81E+00	NA	NA	NA	
	025	84.8	-9.2	7/27/2010	15:22	6.70E+03	4.34E+02	1.30E+02	3.22E-01	4.72E-01	5.34E-01	-3.98E+00	8.82E+00	9.22E-00	2.50E-00	8.43E+00	9.93E+00	NA	NA	NA	
	026	84.8	-9.2	8/23/2010	12:10	5.07E+03	3.96E+02	1.25E+02	6.61E-03	7.89E-01	9.16E-01	3.42E+00	4.55E+00	6.08E-00	1.52E-00	4.77E+00	5.71E+00	NA	NA	NA	
	027	84.8	-9.2	9/7/2010	14:14	6.21E+03	5.24E+02	1.44E+02	-3.25E-01	4.45E-01	6.35E-01	-1.54E+00	5.68E+00	6.11E-00	2.71E-00	5.42E+00	7.79E+00	NA	NA	NA	
	028	84.8	-9.2	11/3/2010	12:00	6.06E+03	4.16E+02	1.14E+02	2.41E-01	4.83E-01	5.47E-01	-1.36E+00	8.68E+00	9.62E-00	-2.66E-01	1.08E+01	1.19E+01	NA	NA	NA	
MW-32-48	005	NA	NA	3/4/2010	13:16	4.52E+04	7.44E+02	1.58E+02	1.02E-01	7.47E-01	9.27E-01	-1.55E-01	3.68E+00	4.41E-00	-5.57E-01	4.11E+00	4.54E+00	NA	NA	NA	MW-32-48
	006	NA	NA	4/28/2010	11:28	6.18E+04	1.80E+03	1.79E+02	7.51E-01	8.02E-01	8.21E-01	3.11E+00	7.80E+00	7.62E-00	1.38E-00	5.13E+00	7.26E+00	NA	NA	NA	
	007	NA	NA	7/27/2010	12:52	3.69E+03	3.26E+02	9.94E+01	3.59E-01	8.37E-01	9.90E-01	1.54E+01	7.00E+00	8.04E-00	-3.66E+00	7.74E+00	7.91E+00	NA	NA	NA	
	008	NA	NA	8/24/2010	14:03	5.90E+03	3.51E+02	2.10E+02	3.55E-01	6.33E-01	7.39E-01	-4.34E-01	4.49E+00	5.04E-00	1.95E-00	4.95E+00	5.95E+00	NA	NA	NA	
MW-32-59	001	58.8	18.3	1/19/2007	9:30	7.67E+03	7.50E+02	5.20E+02	6.30E-01	1.47E+00	1.60E+00	8.50E-01	1.58E+00	2.30E-00	1.50E-01	2.23E+00	2.60E+00	NA	NA	NA	MW-32-59
	002	58.8	18.3	6/28/2007	14:25	2.40E+04	7.37E+02	1.97E+02	-1.65E-01	5.90E-01	7.27E-01	-1.74E+00	3.21E+00	3.30E-00	-1.42E+00	3.87E+00	3.34E+00	NA	NA	NA	
	003	58.8	18.3	8/13/2007	13:07	1.42E+04	6.00E+02	1.99E+02	-2.71E-01	5.58E-01	7.58E-01	1.48E+00	2.10E+00	3.22E-00	-4.66E-01	3.33E+00	3.65E+00	NA	NA	NA	
	001	58.8	18.3	10/26/2007	12:07	1.11E+04	4.61E+02	1.84E+02	3.22E-01	6.43E-01	7.36E-01	-1.94E-01	3.82E+00	3.87E-00	-2.45E-00	3.05E+00	4.08E+00	NA	NA	NA	
	002	58.8	18.3	1/18/2008	13:25	1.87E+04	9.11E+02	1.86E+02	4.67E-01	6.96E-01	7.57E-01	9.98E-01	4.25E+00	4.79E-00	1.99E-00	3.81E+00	4.65E+00	NA	NA	NA	
	003	58.8	18.3	5/5/2008	15:33	4.15E+03	2.01E+02	1.82E+02	7.61E-02	5.20E-01	9.70E-01	-7.25E-01	1.69E+00	3.05E-00	1.25E-00	2.01E+00	3.77E+00	NA	NA	NA	
	004	58.8	18.3	6/9/2008	12:10	2.85E+03	4.81E+02	5.36E+02	-3.39E-01	3.54E-01	7.51E-01	-1.22E+00	1.54E+00	2.98E-00	-7.10E-01	2.43E+00	3.91E+00	NA	NA	NA	
	005	58.8	18.3	7/31/2008	13:23	1.54E+03	1.63E+02	1.94E+02	1.72E-01	3.81E-01	6.90E-01	4.66E-01	1.57E+00	3.33E-00	-1.08E+00	2.43E+00	3.26E+00	NA	NA	NA	
	006	58.8	18.3	9/2/2008	13:52	2.44E+03	4.59E+02	5.53E+02	2.19E-01	5.54E-01	9.34E-01	7.77E-01	1.65E+00	3.21E-00	NA	NA	NA	NA	NA	NA	
	007	58.8	18.3	10/24/2008	13:59	4.13E+03	2.00E+02	1.73E+02	1.63E-01	6.06E-01	7.44E-01	-3.50E-01	7.51E+00	7.30E-00	-1.32E+00	5.29E+00	6.66E+00	NA	NA	NA	
	008	58.8	18.3	2/4/2009	15:46	1.78E+04	1.03E+03	1.98E+02	1.01E-01	5.73E-01	7.59E-01	1.01E-01	3.54E+00	3.41E-00	2.73E-00	3.41E+00	4.34E+00	NA	NA	NA	
	009	58.8	18.3	4/27/2009	15:54	6.43E+04	3.00E+03	4.23E+02	4.22E-01	6.15E-01	6.76E-01	-3.21E+00	4.03E+00	3.22E-00	-5.75E-02	3.63E+00	4.11E+00	NA	NA	NA	
	010	58.8	18.3	6/2/2009	13:59	6.69E+03	9.60E+02	3.77E+02	3.26E-01	4.73E-01	5.25E-01	-1.72E-01	9.62E+00	6.41E-00	-7.66E-01	5.63E+00	6.03E+00	NA	NA	NA	
	011	58.8	18.3	8/31/2009	13:04	8.85E+04	2.07E+02	1.55E+02	1.87E-02	6.37E-01	7.31E-01	1.61E+01	5.47E+00	6.24E-00	9.57E-01	5.47E+00	6.44E+00	NA	NA	NA	
	012	58.8	18.3	8/31/2009	13:24	1.86E+04	5.93E+02	2.16E+02	1.76E-02	3.29E-01	4.26E-01	4.57E-02	4.61E+00	5.09E-00	-2.25E+00	5.87E+00	5.60E+00	NA	NA	NA	
	013	58.8	18.3	9/15/2009	14:33	5.92E+03	3.69E+02	1.55E+02	-4.42E-01	6.95E-01	9.32E-01	1.15E+00	4.70E+00	5.40E-00	-1.17E-01	5.13E+00	5.67E+00	NA	NA	NA	
	014	58.8	18.3	10/22/2009	13:37	5.61E+03	3.33E+02	1.56E+02	-5.42E-01	6.48E-01	9.30E-01	5.15E-01	5.36E+00	6.05E-00	-3.15E+00	7.13E+00	7.04E+00	NA	NA	NA	
	015	58.8	18.3	1/28/2010	14:01	8.92E+04	3.45E+03	6.39E+02	4.07E-02	3.15E-01	4.34E-01	1.02E+00	4.67E+00	4.72E-00	3.05E-00	3.93E+00	4.92E+00	NA	NA	NA	
	016	58.8	18.3	3/4/2010	13:23	8.81E+04	1.03E+03	1.57E+02	1.51E-01	6.31E-01	7.30E-01	6.65E-01	5.36E+00	4.46E-00	-1.40E+00	5.22E+00	4.34E+00	NA	NA	NA	
	017	58.8	18.3	4/28/2010	11:30	6.83E+04	2.00E+03	1.88E+02	-3.10E-01	3.51E-01	6.30E-01	4.95E+00	4.66E+00	6.21E-00	1.55E-00	4.85E+00	5.81E+00	NA	NA	NA	
	018	58.8	18.3	6/9/2010	14:53	1.55E+05	4.58E+03	4.89E+02	4.10E-01	7.75E-01	8.75E-01	-9.71E-01	6.12E+00	6.76E-00	1.48E-00	5.65E+00	7.93E+00	NA	NA	NA	
	019	58.8	18.3	7/27/2010	13:00	6.54E+04	1.91E+03	1.33E+02	1.50E-01	4.37E-01	5.21E-01	1.07E+00	1.02E+01	1.14E-01	3.03E-00	2.25E+00	1.21E+01	NA	NA	NA	
	020	58.8	18.3	8/24/2010	14:22	5.70E+03	3.40E+02	2.10E+02	-9.02E-02	6.14E-01	8.32E-01	3.21E+00	5.64E+00	7.14E-00	-2.61E+00	5.63E+00	6.75E+00	NA	NA	NA	
	021	58.8	18.3	9/9/2010	13:57	7.44E+04	2.18E+03	1.57E+02	4.21E-01	7.20E-01	8.33E-01	1.68E+00	5.43E+00	6.39E-00	-1.58E+00	5.38E+00	5.54E+00	NA	NA	NA	
	022	58.8	18.3	11/3/2010	12:08	1.58E+04	6.66E+02	1.16E+02	2.02E-01	6.15E-01	7.14E-01	6.67E+00	7.58E+00	1.03E-01	1.19E+00	9.11E+00	1.06E+01	NA	NA	NA	
MW-32-85	001	85.3	85.3	1/19/2007	9:40	1.12E+04	8.40E+02	5.30E+02	3.20E-01	1.47E+00	1.60E+00	1.57E+00	2.22E+00	3.10E-00	9.00E-01	4.23E+00	4.80E+00	NA	NA	NA	MW-32-85
	002	85.3	85.3	6/28/2007	15:05	5.42E+03	3.77E+02	1.95E+02	-4.15E-01	5.10E-01	6.75E-01	-1.70E-01	2.77E+00	3.03E-00	-3.05E-01	3.12E+00	3.21E+00	NA	NA	NA	
	003	85.3	85.3	8/13/2007	10:48	5.70E+03	4.05E+02	2.21E+02	-2.45E-02	4.47E-01	5.75E-01	3.28E-01	2.61E+00	3.15E-00	9.50E-01	2.93E+00	3.53E+00	NA	NA	NA	
	004	85.3	85.3	10/26/2007	11:12	1.26E+04	4.79E+02	1.79E+02	-1.17E-01	4.27E-01	6.25E-01	8.85E-01	2.57E+00	3.45E-00	-1.85E-02	3.23E+00	3.63E+00	NA	NA	NA	
	005	85.3	85.3	1/18/2008	14:50	1.07E+04	6.90E+02	1.83E+02	-3.03E-01	4.38E-01	7.35E-01	3.57E-01	2.64E+00	2.67E-00	-5.37E-01	1.97E+00	2.13E+00	NA	NA	NA	
	006	85.3	85.3	5/5/2008	14:10	8.36E+03	2.64E+02	1.81E+02	-6.65E-02	3.89E-01	7.59E-01	1.95E+00	2.16E+00	3.96E-00	-3.64E-01	2.09E+00	3.27E+00	NA	NA	NA	
	007	85.3	85.3	6/9/2008	12:25	1.11E+04	8.21E+02	5.34E+02	9.56E-02	3.57E-01	7.12E-01	1.39E+00	2.61E+00	3.68E-00	5.47E-01	2.01E+00	3.34E+00	NA	NA	NA	
	008	85.3	85.3	7/31/2008	14:35	7.40E+03	2.03E+02	1.93E+02	1.16E-01	3.35E-01	6.24E-01	2.14E-01	2.60E+00	3.50E-00	1.07E-00	1.03E+00	3.43E+00	NA	NA	NA	
	009	85.3	85.3	9/2/2008	14:40	8.05E+03	6.90E+02	5.52E+02	1.42E-01	4.15E-01	7.35E-01	-1.37E+00	2.45E+00	3.52E-00	NA	NA	NA	NA	NA	NA	
	010	85.3	85.3	10/24/2008	14:50	8.62E+03	6.66E+02	1.72E+02	1.15E-01	4.36E-01	5.38E-01	1.29E+00	5.08E+00	6.62E-00	3.08E+00	5.85E+00	6.32E+00	NA	NA	NA	
	011	85.3	85.3	2/4/2009	15:49	6.54E+03	6.38E+02	1.98E+02	5.26E-01	7.76E-01	8.50E-01	4.88E-01	2.65E+00	3.31E-00	2.27E-00	3.23E+00	4.15E+00	NA	NA	NA	
	012	85.3	85.3	4/27/2009	15:34	8.87E+03	1.17E+03	4.31E+02	1.21E-01	5.33E-01	6.47E-01	-2.07E+00	6.11E+00	4.07E-00	1.69E-00	4.03E+00	4.90E+00	NA	NA	NA	
	013	85.3	85.3	6/2/2009	15:11	8.07E+03	1.04E+03	3.76E+02	-1.55E-01	6.47E-01	7.50E-01	-1.73E+00	1.30E+01	8.65E-00	8.98E-01	8.75E+00	9.91E+00	NA	NA	NA	
	015	85.3	85.3	8/31/2009	14:11	8.98E+03	4.22E+02	2.14E+02	4.28E-02	7.57E-01	9.34E-01	8.15E-01	5.03E+00	5.69E-00	-4.57E+00	5.84E+00	5.36E+00	NA	NA	NA	
	016	85.3	85.3	9/15/2009	15:06	7.70E+03	4.17E+02	1.57E+02	1.08E-01	6.33E-01	7.16E-01	2.26E+00	4.83E+00	5.66E-00	-4.65E+00	5.54E+00	5.03E+00	NA	NA	NA	
	017	85.3	85.3	10/22/2009	13:53	7.80E+03	3.83E+02	1.56E+02	1.01E-01	4.77E-01	5.44E-01	1.48E+00	1.11E+01	5.84E-00	-2.02E+00	5.51E+00	6.87E+00	NA	NA	NA	
	018	85.3	85.3	1/28/2010	14:38	8.03E+03	1.11E+03	4.26E+02	6.96E-01	8.28E-01	8.31E-01	2.21E+00	3.45E+00	4.30E-00	2.29E-00	3.27E+00	4.05E+00	NA	NA	NA	
	019	85.3	85.3	3/4/2010	14:44	9.31E+03	3.62E+02	1.58E+02	2.46E-01	4.71E-01	7.31E-01	3.62E-01	3.45E+00	3.85E-00	1.26E+00	3.83E+00	4.04E+00	NA	NA	NA	
	020	85.3	85.3	4/28/2010	13:08	1.15E+04	5.82E+02	1.45E+02	3.95E-02	6.03E-01	7.32E-01	7.18E-01	9.07E+00	9.43E-00	1.03E-00	9.37E+00	8.05E+00	NA	NA	NA	
	021	85.3	85.3	6/9/2010	12:03	1.20E+04	4.85E+02	2.14E+02	3.30E-01	7.56E-01	8.56E-01	-1.92E+00	5.57E+00	6.05E-00	-7.73E-01	5.63E+00	6.30E+00	NA	NA	NA	
	022	85.3	85.3	7/27/2010	14:51	1.21E+04	5.81E+02	1.31E+02	3.80E-01	6.37E-01	7.31E-01	1.38E+00	7.47E+00	8.69E-00	2.53E-00	7.47E+00	9.52E+00	NA	NA	NA	
	023	85.3	85.3	8/24/2010	11:03	1.38E+04	4.94E+02	2.10E+02	-3.76E-01	4.75E-01	7.02E-01	-6.56E-01	5.56E+00	6.62E-00	-1.19E+00	5.22E+00	5.48E+00	NA	NA	NA	

See Page 32 for Notes

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	
MW-32-85	024	85 3	85 3	9/9/2010	15 29	1 44E+04	6 57E+02	1 27E+02	1 34E-01	6 77E-01	8 86E-01	1 43E+00	6 27E+00	6 90E−00	-1 25E-01	5 42E+00	6 10E+00	NA	NA	NA	MW-32-85
	025	85 3	85 3	11/3/2010	12 45	1 49E+04	6 48E+02	1 16E+02	3 00E-01	4 90E-01	5 36E-01	5 89E+00	9 60E+00	1 18E−01	-5 55E+00	8 71E+00	7 61E+00	NA	NA	NA	
MW-32-131	001	130 8	-53 7	1/19/2007	9 45	1 13E+04	8 40E+02	5 30E+02	-1 03E+00	1 47E+00	1 70E+00	-6 30E-02	2 64E+00	2 30E−00	3 00E-02	2 07E+00	2 40E+00	NA	NA	NA	MW-32-131
	002	130 8	-53 7	6/28/2007	12 45	3 02E+02	1 88E+02	1 97E+02	-1 39E-01	5 13E-01	5 34E-01	-1 46E+00	5 09E+00	4 92E−00	9 88E-01	3 75E+00	4 38E+00	NA	NA	NA	
	003	130 8	-53 7	8/13/2007	11 15	1 29E+02	1 70E+02	1 87E+02	2 69E-01	7 33E-01	8 51E-01	-8 39E-01	4 66E+00	4 85E−00	-1 19E+00	3 23E+00	3 22E+00	NA	NA	NA	
	004	130 8	-53 7	10/26/2007	10 11	3 74E+02	2 39E+02	2 42E+02	2 47E-01	6 73E-01	7 16E-01	-1 81E-01	3 48E+00	3 82E−00	-2 55E-01	3 97E+00	3 99E+00	NA	NA	NA	
	005	130 8	53 7	1/18/2008	11 23	5 04E+02	2 07E+02	1 79E+02	5 14E 01	7 79E 01	8 52E 01	8 47E 01	2 19E+00	2 21E−00	8 70E 02	1 92E+00	2 18E+00	NA	NA	NA	
	006	130 8	-53 7	5/5/2008	12 35	1 03E+03	1 36E+02	1 23E+02	-2 09E-01	3 30E-01	7 75E-01	-1 21E+00	2 28E+00	3 55E 00	-3 26E-01	2 27E+00	3 66E+00	NA	NA	NA	
MW-32-149	004	149 3	-72 2	10/26/2007	10 10	2 92E+03	2 94E+02	1 90E+02	-2 45E-01	4 89E-01	7 22E-01	1 99E-01	3 10E+00	3 51E−00	1 05E-01	3 35E+00	3 99E+00	NA	NA	NA	MW-32-149
	005	149 3	-72 2	1/18/2008	11 18	1 15E+03	2 69E+02	1 85E+02	3 04E-01	8 25E-01	9 33E-01	2 94E+00	4 29E+00	3 08E−00	-8 74E-01	2 82E+00	2 93E+00	NA	NA	NA	
	006	149 3	-72 2	5/5/2008	10 54	8 83E+02	1 31E+02	1 82E+02	7 39E-01	5 25E-01	7 34E-01	-2 99E+00	2 67E+00	3 71E−00	2 04E−00	2 12E+00	4 12E+00	NA	NA	NA	
	007	149 3	-72 2	7/31/2008	11 10	5 32E+02	1 31E+02	1 94E+02	1 38E-02	3 46E-01	6 30E-01	1 06E+00	1 65E+00	2 87E−00	1 42E−00	1 55E+00	2 81E+00	NA	NA	NA	
	008	149 3	-72 2	10/24/2008	10 28	5 03E+02	2 10E+02	1 72E+02	4 69E-01	6 52E-01	6 99E-01	1 80E+00	5 22E+00	6 07E−00	1 25E−00	4 95E+00	5 82E+00	NA	NA	NA	
	009	149 3	-72 2	2/4/2009	13 50	2 65E+02	1 18E+02	1 17E+02	4 53E-01	6 75E-01	7 34E-01	5 44E-01	2 59E+00	3 38E−00	3 32E-01	2 91E+00	3 28E+00	NA	NA	NA	
	010	149 3	-72 2	4/27/2009	13 31	3 21E+02	1 79E+02	1 87E+02	7 04E-01	8 48E-01	9 20E-01	1 35E+00	4 26E+00	2 84E−00	-4 83E-02	2 34E+00	2 57E+00	NA	NA	NA	
	011	149 3	-72 2	6/9/2009	12 05	2 24E+02	1 53E+02	1 52E+02	-2 06E-01	6 50E-01	7 30E-01	-2 68E+00	1 02E+01	6 78E−00	2 12E−00	7 04E+00	8 40E+00	NA	NA	NA	
	012	149 3	-72 2	8/3/2009	12 43	3 90E+02	1 70E+02	1 57E+02	9 42E-02	6 51E-01	7 30E-01	2 86E+00	6 63E+00	7 79E−00	-9 46E-01	8 14E+00	7 75E+00	NA	NA	NA	
	013	149 3	72 2	8/31/2009	11 29	4 57E+02	2 06E+02	2 15E+02	2 81E 01	5 25E 0:	6 30E 01	1 45E+00	5 66E+00	6 05E−00	1 77E 01	1 81E+00	5 32E+00	NA	NA	NA	
	014	149 3	-72 2	9/15/2009	12 39	1 99E+02	1 40E+02	1 54E+02	-9 07E-02	7 77E-01	9 22E-01	1 03E+00	5 51E+00	6 65E−00	2 31E−00	5 12E+00	7 24E+00	NA	NA	NA	
	015	149 3	-72 2	10/22/2009	15 39	2 95E+02	1 59E+02	1 57E+02	-9 56E-02	4 21E-0:	5 33E-01	-6 75E+00	9 40E+00	7 45E−00	-5 88E-01	8 74E+00	8 40E+00	NA	NA	NA	
	016	149 3	-72 2	1/28/2010	11 47	5 28E+03	9 24E+02	4 80E+02	2 02E-0:	7 48E-0:	8 85E-01	2 15E+00	5 71E+00	4 43E−00	4 50E-01	4 71E+00	4 73E+00	NA	NA	NA	
	017	149 3	-72 2	4/28/2010	13 50	6 60E+03	4 52E+02	1 47E+02	3 03E-0:	7 38E-0:	8 24E-01	1 98E+00	6 88E+00	7 55E−00	9 80E-01	4 44E+00	5 36E+00	NA	NA	NA	
	018	149 3	-72 2	6/9/2010	12 52	9 76E+03	4 44E+02	2 14E+02	-1 16E-01	6 45E-0:	8 05E-01	-8 57E-0:	8 36E+00	9 08E−00	-4 49E+00	5 23E+00	5 62E+00	NA	NA	NA	
	019	149 3	-72 2	7/27/2010	15 34	3 81E+03	3 33E+02	1 31E+02	1 14E-0:	3 57E-0:	4 33E-01	7 24E-01	1 28E+01	1 64E−01	1 53E−00	8 83E+00	1 06E+01	NA	NA	NA	
	020	149 3	-72 2	8/24/2010	11 27	2 60E+03	2 70E+02	2 10E+02	1 04E-0:	6 54E-0:	8 13E-01	1 04E-01	6 51E+00	7 44E−00	2 67E-02	5 88E+00	6 71E+00	NA	NA	NA	
	021	149 3	-72 2	9/9/2010	11 36	2 12E+03	2 70E+02	1 27E+02	2 27E-0:	7 72E-0:	9 22E-01	3 68E+00	7 63E+00	9 16E−00	1 24E−00	8 52E+00	1 00E+01	NA	NA	NA	
	022	149 3	-72 2	11/3/2010	16 09	1 55E+03	2 24E+02	1 12E+02	4 08E-0:	5 22E-0:	5 49E-01	-1 00E+01	1 08E+01	1 15E−01	3 35E−00	7 71E+00	9 94E+00	NA	NA	NA	
MW 32 165	001	163	85 9	1/19/2007	9 50	1 05E+04	8 70E+02	5 70E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	MW 32 165
	002	163	-85 9	6/28/2007	13 06	5 01E+02	2 03E+02	1 97E+02	-2 02E-01	7 33E-0:	9 70E-01	8 54E-01	2 65E+00	2 45E−00	-8 16E-01	2 45E+00	2 60E+00	NA	NA	NA	
	003	163	-85 9	8/13/2007	11 35	4 93E+02	2 09E+02	2 08E+02	-6 38E-01	3 81E-0:	6 32E-01	-1 42E+00	3 76E+00	3 37E−00	1 63E−00	1 69E+00	2 91E+00	NA	NA	NA	
MW-32-175	001	172 8	-55 7	10/26/2007	9 55	5 89E+03	5 87E+02	1 42E+02	1 86E-02	5 87E-0:	7 54E-01	6 92E-01	5 08E+00	5 51E−00	-9 97E-01	2 91E+00	5 02E+00	NA	NA	NA	MW-32-175
	002	172 8	-55 7	1/18/2008	11 05	3 40E+03	4 07E+02	1 82E+02	1 13E-0:	6 22E-0:	7 53E-01	-3 84E-0:	2 00E+00	2 18E−00	-6 74E-01	2 02E+00	2 25E+00	NA	NA	NA	
	003	172 8	-55 7	5/5/2008	10 33	1 69E+03	1 52E+02	1 82E+02	1 11E-02	3 53E-0:	7 39E-01	1 95E-01	2 18E+00	3 64E−00	5 47E-01	2 24E+00	3 91E+00	NA	NA	NA	
	004	172 8	-55 7	7/31/2008	10 52	1 08E+03	1 48E+02	1 92E+02	6 00E-0:	4 52E-0:	7 11E-01	-1 17E+00	1 58E+00	2 47E−00	6 06E-01	1 65E+00	2 96E+00	NA	NA	NA	
	005	172 8	-55 7	9/2/2008	11 30	9 72E+02	3 72E+02	5 48E+02	1 05E-0:	4 54E-0:	8 41E-01	-1 02E+00	2 67E+00	3 88E−00	NA	NA	NA	NA	NA	NA	
	006	172 8	-55 7	10/24/2008	10 25	1 03E+03	2 67E+02	1 74E+02	1 05E-0:	3 50E-0:	4 36E-01	8 63E-01	5 67E+00	6 61E−00	2 30E−00	5 35E+00	7 74E+00	NA	NA	NA	
	007	172 8	-55 7	2/4/2009	13 40	7 56E+02	1 45E+02	1 17E+02	2 57E-01	4 26E-0:	4 74E-01	1 79E+00	3 65E+00	4 41E−00	2 55E−00	3 47E+00	4 49E+00	NA	NA	NA	
	008	172 8	-55 7	4/27/2009	13 32	7 86E+02	4 77E+02	4 31E+02	7 47E-02	4 43E-0:	5 48E-01	-3 20E+00	6 12E+00	4 08E−00	1 19E−00	4 77E+00	5 59E+00	NA	NA	NA	
	009	172 8	-55 7	6/2/2009	11 50	1 72E+03	2 19E+02	1 50E+02	1 05E-0:	5 70E-0:	6 59E-01	-1 33E+00	2 20E+00	6 13E 00	-1 40E+00	5 21E+00	6 55E+00	NA	NA	NA	
	010	172 8	-55 7	9/3/2009	12 37	4 93E+02	1 77E+02	1 55E+02	-4 67E-02	3 39E-0:	5 13E-01	3 21E+00	5 34E+00	6 46E 00	-7 71E-01	4 92E+00	5 26E+00	NA	NA	NA	
	011	172 8	-55 7	8/31/2009	11 31	5 79E+02	2 09E+02	2 13E+02	-4 09E-04	6 26E-0:	7 50E-01	1 81E+00	4 96E+00	5 93E−00	2 58E−00	5 62E+00	7 35E+00	NA	NA	NA	
	012	172 8	-55 7	9/15/2009	12 11	4 71E+02	1 62E+02	1 55E+02	-5 95E-03	6 75E-0:	8 21E-01	2 46E+00	4 52E+00	5 83E−00	-6 66E+00	7 53E+00	6 57E+00	NA	NA	NA	
	013	172 8	-55 7	10/22/2009	15 36	4 31E+02	1 68E+02	1 58E+02	-1 01E-02	3 85E-0:	4 95E-01	-2 49E-0:	5 67E+00	6 61E−00	6 81E-01	5 73E+00	6 64E+00	NA	NA	NA	
	014	172 8	-55 7	1/28/2010	11 42	1 33E+03	6 95E+02	6 53E+02	1 67E-0:	7 37E-0:	8 74E-01	-4 48E+00	7 32E+00	7 64E−00	2 11E−00	4 42E+00	5 30E+00	NA	NA	NA	
	015	172 8	-55 7	4/28/2010	15 45	1 54E+03	2 45E+02	1 48E+02	4 63E-0:	5 34E-0:	5 49E-01	4 96E+00	5 45E+00	6 79E−00	-8 08E-01	4 93E+00	5 21E+00	NA	NA	NA	
	016	172 8	-55 7	6/9/2010	12 23	2 34E+03	2 66E+02	2 38E+02	3 04E-0:	5 97E-0:	6 31E-01	-9 10E-0:	6 63E+00	7 29E−00	8 09E-01	5 43E+00	7 43E+00	NA	NA	NA	
	017	172 8	-55 7	7/27/2010	15 17	2 47E+03	2 69E+02	9 88E+01	9 64E-02	3 38E-0:	4 14E-01	-1 51E+00	8 71E+00	9 65E−00	-2 29E+00	7 04E+00	7 12E+00	NA	NA	NA	
	018	172 8	-55 7	8/24/2010	11 23	2 19E+03	2 60E+02	2 10E+02	-1 37E-01	3 98E-0:	5 77E-01	2 92E+00	6 47E+00	7 87E−00	4 56E-01	5 55E+00	7 47E+00	NA	NA	NA	
	019	172 8	55 7	9/9/2010	11 29	1 98E+03	2 63E+02	1 28E+02	5 82E 0:	8 34E 0:	8 26E 01	1 67E+00	4 66E+00	5 81E−00	9 94E 01	1 81E+00	5 77E+00	NA	NA	NA	
	020	172 8	-55 7	11/3/2010	15 53	1 40E+03	2 16E+02	1 14E+02	1 05E-02	4 30E-0:	5 24E-01	3 67E+00	1 76E+01	9 02E 00	-2 54E+00	9 03E+00	1 01E+01	NA	NA	NA	
MW-32-190	001	190 3	-1 3 7	1/19/2007	9 55	1 13E+04	8 40E+02	5 20E+02	4 20E-0:	1 30E+00	1 70E+00	2 60E-01	1 26E+00	1 40E−00	7 10E-01	1 53E+00	1 70E+00	NA	NA	NA	MW-32-190
	002	190 3	-1 3 7	6/28/2007	13 07	2 41E+03	2 72E+02	1 87E+02	-5 09E-02	6 12E-0:	8 20E-01	1 26E+00	5 07E+00	5 64E−00	-1 29E+00	3 27E+00	3 57E+00	NA	NA	NA	
	003	190 3	-1 3 7	8/13/2007	11 25	1 72E+03	2 67E+02	2 33E+02	-3 65E-01	8 12E-0:	1 04E+00	6 21E-01	2 49E+00	2 93E−00	-1 19E+00	2 33E+00	2 39E+00	NA	NA	NA	
	004	190 3	-1 3 7	10/26/2007	9 53	9 76E+03	4 80E+02	1 93E+02	-5 05E-01	7 75E-0:	9 73E-01	-6 17E-0:	3 67E+00	3 27E−00	-1 94E-01	3 13E+00	3 57E+00	NA	NA	NA	
	005	190 3	-1 3 7	1/18/2008	11 35	8 89E+03	6 32E+02	1 83E+02	4 28E-0:	7 73E-0:	8 59E-01	6 57E-01	1 71E+00	2 02E−00	5 18E-01	1 65E+00	1 96E+00	NA	NA	NA	
	006	190 3	-1 3 7	5/5/2008	10 57	6 73E+03	2 41E+02	1 82E+02	-1 68E-01	4 28E-0:	8 16E-01	-1 18E+00	2 68E+00	3 24E−00	-2 62E+00	3 15E+00	2 97E+00	NA	NA	NA	
	007	190 3	-1 3 7	7/31/2008	11 24	4 71E+03	2 35E+02	1 94E+02	3 21E-0:	3 35E-0:	5 51E-01	-8 54E-0:	1 55E+00	2 53E−00	2 22E−00	1 77E+00	3 30E+00	NA	NA	NA	
	008	190 3	-1 3 7	9/9/2008	11 40	3 81E+03	5 20E+02	5 44E+02	5 92E-0:	5 81E-0:	9 53E-01	1 59E+00	2 62E+00	4 63E−00	NA	NA	NA	NA	NA	NA	
	009	190 3	-1 3 7	10/24/2008	10 31	3 35E+03	4 31E+02	1 73E+02	3 30E-03	5 75E-0:	7 41E-01	5 89E-01	5 33E+00	5 98E−00	3 85E−00	5 63E+00	7 16E+00	NA	NA	NA	
	010	190 3	1 3 7	2/4/2009	13 45	2 69E+03	4 26E+02	1 78E+02	2 44E 0:	5 57E 0:	6 17E 01	3 60E 02	2 67E+00	2 95E−00	1 71E 01	3 02E+00	3 44E+00	NA	NA	NA	
	011	190 3	-1 3 7	4/27/2009	13 24	2 54E+03	6 68E+02	4 29E+02	-2 51E-02	5 58E-0:	6 30E-01	-6 89E-0:	4 01E+00	2 67E−00	5 11E-01	2 33E+00	2 68E+00	NA	NA	NA	
	012	190 3	-1 3 7	6/2/2009	12 01	1 95E+03	5 76E+02	3 78E+02	8 61E-02	5 29E-0:	5 90E-01	3 64E-01	1 02E+01	6 77E−00	1 25E−00	5 73E+00	6 67E+00	NA	NA	NA	
	013	190 3	-1 3 7	8/31/2009	12 45	2 03E+03	2 76E+02	1 36E+02	1 36E-0:	5 54E-0:	6 59E-01	9 60E-02	5 25E+00	5 81E−00	-2 29E+00	4 90E+00	4 66E+00	NA	NA	NA	
	014	190 3	-1 3 7	8/31/2009	11 41	2 14E+03	2 61E+02	2 13E+02	1 65E-0:	5 30E-0:	6 20E-01	2 01E+00	6 21E+00	7 34E−00	2 09E−00	5 91E+00	7 13E+00	NA	NA	NA	

See Page 32 for Notes

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	
MW-32-190	015	190.3	-1.3.7	9/15/2009	12.13	1.77E+03	2.28E+02	1.53E+02	3.73E-01	7.22E-01	8.16E-01	1.75E+00	4.04E+00	4.89E-00	4.08E-01	4.52E+00	5.13E+00	NA	NA	NA	MW-32-190
	016	190.3	-1.3.7	10/22/2009	15.30	1.63E+03	2.18E+02	1.57E+02	8.62E-02	3.50E-01	4.39E-01	-1.67E+00	6.11E+00	6.45E-00	3.05E-01	5.95E+00	6.67E+00	NA	NA	NA	
	017	190.3	-1.3.7	1/28/2010	11.57	1.71E+03	5.91E+02	4.25E+02	4.33E-01	4.97E-01	5.09E-01	-1.94E-02	4.23E+00	4.80E-00	1.29E-00	4.62E+00	5.46E+00	NA	NA	NA	
	018	190.3	-1.3.7	3/4/2010	12.42	1.98E+03	2.10E+02	1.57E+02	4.99E-03	5.73E-01	7.52E-01	-6.41E-01	3.29E+00	3.70E-00	3.53E-00	3.74E+00	4.67E+00	NA	NA	NA	
	019	190.3	-1.3.7	4/28/2010	15.51	1.59E+03	2.48E+02	1.49E+02	-2.92E-01	7.31E-01	9.35E-01	1.82E+00	5.66E+00	6.65E-00	-2.37E+00	5.33E+00	5.33E+00	NA	NA	NA	
	020	190.3	-1.3.7	6/9/2010	17.43	1.76E+03	2.45E+02	2.35E+02	4.69E-01	8.43E-01	9.49E-01	-3.64E+00	5.59E+00	6.07E-00	1.50E-00	5.84E+00	6.92E+00	NA	NA	NA	
	021	190.3	-1.3.7	7/27/2010	15.41	1.59E+03	2.21E+02	9.83E+01	9.57E-02	3.52E-01	5.26E-01	-6.23E-01	7.68E+00	9.16E-00	-2.42E+00	7.77E+00	7.60E+00	NA	NA	NA	
	022	190.3	-1.3.7	8/24/2010	11.37	1.69E+03	2.43E+02	2.20E+02	2.54E-01	7.34E-01	9.25E-01	-5.47E-01	4.64E+00	5.45E-00	9.00E-01	4.92E+00	5.87E+00	NA	NA	NA	
	023	190.3	-1.3.7	9/9/2010	11.34	1.65E+03	2.48E+02	1.30E+02	-1.31E-01	5.85E-01	8.27E-01	-2.39E-01	9.87E+00	1.08E-01	2.00E+00	9.63E+00	7.98E+00	NA	NA	NA	
	024	190.3	-1.3.7	11/3/2010	16.07	1.55E+03	2.28E+02	1.17E+02	-9.74E-02	4.85E-01	5.82E-01	2.12E+00	9.02E+00	1.07E-01	-2.40E+00	7.21E+00	7.56E+00	NA	NA	NA	
MW-33	001	19.2	-0.4	12/15/2005	8.30	1.42E+05	4.26E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	MW-33
	002	19.2	-0.4	12/19/2005	11.38	1.99E+05	5.97E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	003	19.2	-0.4	12/29/2005	11.30	2.20E+05	6.60E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	004	19.2	-0.4	1/6/2006	12.30	1.89E+05	5.67E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	005	19.2	-0.4	1/13/2006	12.10	2.32E+05	6.96E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	006	19.2	-0.4	1/20/2006	10.40	2.26E+05	6.78E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	007	19.2	-0.4	1/27/2006	11.10	2.42E+05	7.26E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	008	19.2	0.4	2/3/2006	12.15	2.50E+05	2.84E+04	6.33E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	009	19.2	-0.4	2/7/2006	16.00	2.14E+05	2.64E+04	6.37E+02	1.36E-01	5.26E-01	6.25E-01	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	010	19.2	-0.4	2/16/2006	13.55	2.61E+05	2.91E+04	6.36E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	011	19.2	-0.4	3/3/2006	10.20	2.53E+05	7.59E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	012	19.2	-0.4	4/7/2006	10.25	2.21E+05	6.63E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	014	19.2	-0.4	5/17/2006	12.50	1.35E+05	2.01E+04	1.50E+03	7.79E-01	1.43E+00	1.47E+00	1.17E+01	1.19E+01	1.37E-01	4.62E-00	1.41E+01	1.28E+01	NA	NA	NA	
	015	19.2	-0.4	6/7/2006	10.15	1.41E+05	1.85E+04	1.32E+03	6.74E-01	5.53E-01	6.44E-01	6.95E-01	8.72E+00	9.58E-00	-6.11E+00	8.63E+00	8.02E+00	NA	NA	NA	
	017	19.2	-0.4	7/3/2006	9.50	2.64E+05	2.01E+04	3.85E+03	4.78E-01	1.37E+00	1.57E+00	-6.85E-01	1.17E+01	1.27E-01	-5.24E+00	1.23E+01	1.21E+01	NA	NA	NA	
	018	19.2	-0.4	8/4/2006	8.15	1.84E+05	2.54E+04	1.87E+03	NA	NA	NA	3.53E+00	6.31E+00	7.84E-00	-1.14E+00	7.35E+00	8.60E+00	NA	NA	NA	
	019	19.2	-0.4	8/30/2006	13.00	1.15E+05	1.77E+04	4.39E+03	NA	NA	NA	-6.99E-01	8.47E+00	8.90E-00	3.71E-00	7.21E+00	9.60E+00	NA	NA	NA	
	020	19.2	0.4	9/15/2007	15.40	9.06E+04	3.26E+03	3.51E+02	2.02E-01	2.86E-01	4.35E-01	2.70E-01	3.62E+00	3.76E-00	1.64E+00	3.41E+00	3.39E+00	0.12E-01	1.16E+01	1.37E+01	
	021	19.2	-0.4	9/3/2007	10.20	2.30E+04	7.00E+02	2.24E+02	5.00E-01	8.49E-01	9.33E-01	8.10E-01	2.27E+00	2.03E-00	2.45E-01	2.13E+00	2.46E+00	NA	NA	NA	
	022	19.2	-0.4	4/28/2008	15.00	5.85E+04	1.16E+03	2.58E+02	1.69E-01	2.97E-01	5.22E-01	1.08E-01	1.67E+00	3.12E-00	-4.51E-02	2.12E+00	3.49E+00	NA	NA	NA	
	023	19.2	-0.4	9/4/2008	14.41	6.80E+04	1.82E+03	5.47E+02	1.33E-01	4.05E-01	7.05E-01	5.46E-01	1.61E+00	2.88E-00	NA	NA	NA	NA	NA	NA	
	024	19.2	-0.4	4/29/2009	15.12	3.44E+04	1.30E+03	1.72E+02	2.74E-01	5.39E-01	6.09E-01	-1.06E+00	8.53E+00	5.95E-00	1.83E-00	5.72E+00	6.77E+00	NA	NA	NA	
	025	19.2	-0.4	2/2/2010	13.15	3.20E+04	2.16E+03	4.38E+02	-1.15E-01	7.38E-01	9.21E-01	2.64E+00	3.44E+00	4.21E-00	4.59E-01	3.95E+00	4.42E+00	NA	NA	NA	
	026	19.2	-0.4	4/15/2010	13.54	6.31E+04	1.06E+03	1.76E+02	-1.77E-01	6.50E-01	8.35E-01	-3.35E+00	7.39E+00	7.21E-00	-5.17E+00	7.74E+00	6.17E+00	NA	NA	NA	
	027	19.2	-0.4	8/30/2010	14.29	3.69E+03	3.42E+02	1.26E+02	1.64E-01	3.24E-01	3.59E-01	7.72E-01	5.64E+00	6.38E-00	-3.08E-01	5.07E+00	5.60E+00	NA	NA	NA	
	028	19.2	-0.4	9/11/2010	13.28	3.86E+03	3.53E+02	1.27E+02	9.96E-03	7.38E-01	9.28E-01	-1.30E+00	4.66E+00	5.14E-00	1.12E-00	5.12E+00	5.95E+00	NA	NA	NA	
MW-34	001	18.9	-0.4	12/15/2005	13.53	6.39E+04	1.92E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	MW-34
	002	18.9	-0.4	12/19/2005	10.35	1.21E+05	3.63E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	003	18.9	-0.4	12/29/2005	10.50	1.47E+05	4.41E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	004	18.9	-0.4	1/6/2006	11.35	1.59E+05	4.77E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	005	18.9	-0.4	1/13/2006	11.40	1.31E+05	3.93E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	006	18.9	-0.4	1/20/2006	10.00	2.11E+05	6.33E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	007	18.9	-0.4	1/27/2006	10.50	2.12E+05	6.36E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	008	18.9	-0.4	2/3/2006	12.20	2.24E+05	2.69E+04	6.33E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	009	18.9	-0.4	2/7/2006	15.15	1.74E+05	2.38E+04	6.37E+02	9.22E-02	3.78E-01	4.57E-01	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	010	18.9	-0.4	2/16/2006	13.55	1.99E+05	2.55E+04	6.36E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	011	18.9	-0.4	3/3/2006	9.35	2.30E+05	6.90E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	012	18.9	-0.4	4/7/2006	10.05	2.76E+05	8.28E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	013	18.9	0.4	5/17/2006	13.15	3.64E+04	5.52E+03	8.35E+02	2.50E-02	6.53E-01	9.24E-01	7.84E+00	1.39E+01	1.55E-01	2.72E-00	1.31E+01	1.44E+01	NA	NA	NA	
	014	18.9	-0.4	6/26/2006	10.20	1.05E+04	9.52E+02	3.41E+02	3.71E-01	6.49E-01	7.79E-01	1.03E+00	7.65E+00	0.96E-00	5.04E-00	7.34E+00	9.37E+00	NA	NA	NA	
	015	18.9	-0.4	7/26/2006	10.20	4.07E+04	3.51E+03	1.57E+03	2.18E-01	8.97E-01	1.06E+00	-1.73E-01	4.87E+00	5.24E-00	-2.54E-01	5.64E+00	6.78E+00	NA	NA	NA	
	016	18.9	-0.4	8/24/2006	12.18	6.69E+04	1.05E+04	5.59E+03	NA	NA	NA	1.62E+00	5.81E+00	6.78E-00	-1.60E+00	5.85E+00	5.85E+00	NA	NA	NA	
	017	18.9	-0.4	9/21/2006	9.45	1.61E+04	2.78E+03	5.86E+02	0.00E+00	1.12E+00	1.31E+00	6.09E-02	1.69E+00	1.85E-00	-2.10E-01	1.65E+00	1.79E+00	NA	NA	NA	
	018	18.9	-0.4	8/3/2007	10.21	2.22E+04	7.44E+02	2.13E+02	3.94E-02	7.38E-01	9.34E-01	-1.35E+00	4.53E+00	4.44E-00	2.12E-00	3.43E+00	4.01E+00	NA	NA	NA	
MW-35	001	19	-0.4	12/13/2005	13.50	4.23E+04	3.18E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	MW-35
	002	19	-0.4	12/19/2005	10.17	7.60E+04	2.28E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	003	19	-0.4	12/29/2005	10.00	8.05E+04	2.42E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	004	19	-0.4	1/6/2006	11.10	9.54E+04	2.86E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	005	19	-0.4	1/13/2006	10.50	9.78E+04	2.93E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	006	19	0.4	1/20/2006	9.30	1.04E+05	3.12E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	007	19	-0.4	1/27/2006	11.00	3.87E+04	1.16E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	008	19	-0.4	2/3/2006	12.20	5.14E+04	1.29E+04	6.33E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	009	19	-0.4	2/7/2006	14.40	8.44E+04	1.66E+04	6.37E+02	1.62E-01	4.32E-01	5.38E-01	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	010	19	-0.4	2/16/2006	13.30	9.04E+04	1.72E+04	6.36E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

See Page 32 for Notes

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	
MW-35	011	19	-0 4	3/3/2006	9 05	1 19E+C5	3 57E+C3	7 00E+02	NA	Na	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	MW-35
	012	19	-0 4	4/7/2006	9 55	5 62E+C4	1 69E+C3	7 00E+02	NA	Na	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	013	19	-0 4	5/17/2006	13 37	4 07E+C4	6 15E+C3	8 72E+02	4 70E-0:	7 53E-0:	7 37E-01	6 46E+00	2 07E+01	1 64E-01	3 04E-00	1 37E+01	1 53E+01	NA	NA	NA	
	014	19	-0 4	6/26/2006	10 40	1 74E+C4	1 37E+C3	4 29E+02	-2 30E-01	6 56E-0:	8 59E-01	-1 34E+00	1 C1E+01	1 09E-01	-2 45E+0C	8 92E+00	9 36E+00	NA	NA	NA	
	015	19	-0 4	9/21/2006	9 30	4 53E+C4	7 19E+C3	9 12E+02	6 26E-0:	1 30E+00	1 41E+00	-3 15E-0:	1 56E+0C	1 82E-0C	2 44E-01	1 4?E+00	1 69E+00	NA	NA	NA	
	016	19	-0 4	6/15/2007	13 58	2 03E+C3	5 87E+C2	3 84E+02	2 26E-0:	4 34E-0:	4 91E-01	4 65E+01	8 52E+0C	2 81E-0C	-1 77E+0C	2 53E+00	3 63E+00	6 18E+00	1 92E+01	2 20E+01	
	017	19	0 4	8/3/2007	10 22	5 95E+C3	5 58E+C2	2 70E+02	9 45E 02	5 76E 0:	6 20E 01	9 20E 0:	2 21E+0C	2 82E-0C	5 74E 01	2 03E+00	3 33E+00	NA	NA	NA	
	018	19	-0 4	4/20/2008	13 30	1 04E+C3	1 77E+C2	2 19E+02	2 34E-0:	2 26E-0:	5 03E-01	-2 03E-02	2 C3E+0C	3 34E 00	-5 77E-02	2 35E+00	3 07E+00	NA	NA	NA	
	019	19	-0 4	4/30/2009	11 17	1 46E+C3	3 03E+C2	1 74E+02	-2 75E-01	5 13E-0:	6 38E-01	-1 03E+00	9 27E+0C	6 18E-0C	-1 87E+0C	5 78E+00	6 00E+00	NA	NA	NA	
	020	19	-0 4	5/20/2010	13 25	2 82E+C3	2 87E+C2	2 14E+02	-1 97E-01	4 52E-0.	6 73E-01	1 1E+00	2 6?E+0C	6 71E-0C	-1 24E+0C	5 53E+00	6 84E+00	NA	NA	NA	
MW-36-24	001	15 1	-4 3	2/7/2006	17 00	NA	NA	NA	1 29E+00	5 48E-0:	5 53E-01	NA	NA	NA	NA	NA	NA	NA	NA	NA	MW-36-24
	002	15 1	-4 3	2/27/2006	9 45	3 04E+C4	9 95E+C3	6 36E+02	NA	Na	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	003	15 1	-4 3	3/23/2006	16 00	3 42E+C4	3 01E+C3	1 86E+03	9 99E-0:	6 42E-0:	6 42E-01	-3 36E+00	1 C1E+01	1 05E-01	5 02E-00	9 33E+00	1 22E+01	6 41E+01	1 59E+01	1 53E+01	
	004	15 1	-4 3	4/5/2006	10 30	NA	NA	NA	1 56E+00	4 86E-0:	4 35E-01	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	005	15 1	-4 3	6/5/2006	12 20	2 02E+C2	1 59E+C2	1 51E+02	3 70E-0:	7 56E-0:	9 31E-01	3 99E+00	1 C3E+01	1 21E-01	6 90E-02	1 02E+01	1 12E+01	NA	NA	NA	
	006	15 1	-4 3	8/28/2006	10 30	2 45E+C2	1 80E+C2	1 71E+02	Na	Na	Na	-1 04E+00	3 57E+0(	3 37E-0C	1 65E-00	3 05E+00	4 19E+00	NA	NA	NA	
	007	15 1	-4 3	6/27/2007	10 40	1 54E+C2	1 76E+C2	1 93E+02	5 90E-0:	7 92E-0:	8 46E-01	3 31E-01	2 61E+0C	3 17E-0C	4 00E-01	3 03E+00	3 45E+00	NA	NA	NA	
	008	15 1	4 3	8/8/2007	13 45	1 63E+C2	1 85E+C2	2 04E+02	5 35? 01	6 81E 0:	9 31E 01	1 53E 01	3 40E+0C	3 77E-0C	3 56E-00	3 43E+00	4 17E+00	7 46E+00	2 10E+01	2 54E+01	
	009	15 1	-4 3	10/18/2C07	10 06	2 86E+C2	1 91E+C2	2 21E+02	8 5?E-02	7 50E-0:	9 26E-01	7 20E-01	2 51E+0C	3 37E-0C	3 11E-01	3 01E+00	3 47E+00	NA	NA	NA	
	010	15 1	-4 3	1/23/2008	14 18	2 16E+C3	2 36E+C2	1 70E+02	1 03E-0.	3 12E-0.	3 76E-01	2 92E-02	2 39E+0C	2 67E-0C	-4 84E-01	2 37E+00	2 57E+00	NA	NA	NA	
	011	15 1	-4 3	7/24/2008	13 57	1 02E+C3	1 22E+C2	1 53E+02	3 38E-0:	3 75E-0:	6 84E-01	3 9?E-01	2 C9E+0(	3 61E-0C	-5 45E-01	2 3?E+00	3 85E+00	NA	NA	NA	
	012	15 1	-4 3	1/10/2C08	15 33	2 01E+C2	1 50E+C2	1 51E+02	5 52E-0:	7 53E-0:	8 34E-01	0 00E+00	6 61E+0C	4 46E-0C	2 72E-00	3 84E+00	5 41E+00	NA	NA	NA	
	013	15 1	-4 3	1/22/2009	12 48	2 37E+C2	1 16E+C2	1 06E+02	-6 26?-01	7 37E-0:	9 48E-01	5 41E-01	2 68E+0(	3 34E-0C	3 15E-01	3 35E+00	3 82E+00	NA	NA	NA	
	014	15 1	-4 3	5/1/2009	13 55	4 98E+C2	1 98E+C2	1 52E+02	-1 28?-01	7 22E-0:	8 58E-01	1 20E+00	7 73E+0(	5 15E-0C	-8 11E-01	4 12E+00	4 36E+00	NA	NA	NA	
	015	15 1	-4 3	8/4/2009	16 09	2 92E+C3	3 20E+C2	1 55E+02	4 60E-0:	6 52E-0:	7 29E-01	-2 97E-0:	5 12E+0(	4 98E-0C	7 76E-01	5 67E+00	6 40E+00	NA	NA	NA	
	016	15 1	-4 3	10/28/2C09	15 48	1 47E+C3	2 00E+C2	1 51E+02	6 36E-0:	8 91E-0:	9 78E-01	-9 30E-0:	3 65E+0(	4 03E-0C	-3 01E-01	4 85E+00	5 04E+00	NA	NA	NA	
	017	15 1	-4 3	2/1/2010	13 49	6 60E+C2	5 97E+C2	6 18E+02	7 81E-0:	8 34E-0:	8 46E-01	2 13E+00	3 54E+0(	3 80E-0C	0 00E-00	4 13E+00	4 27E+00	NA	NA	NA	
	018	15 1	4 3	4/28/2010	14 14	3 53E+C3	3 39E+C2	1 45E+02	1 91E 0:	5 50E 0:	6 57E 01	1 54E+00	5 67E+0(	6 86E-0C	2 13E-00	5 66E+00	6 86E+00	NA	NA	NA	
	019	15 1	-4 3	7/29/2010	12 04	2 64E+C2	1 17E+C2	1 30E+02	2 45L-0:	3 34L-0:	4 23L-01	8 09E-01	2 C0E+0(	1 10E 01	-2 61E+0C	1 13E+01	1 26E+01	NA	NA	NA	
	020	15 1	-4 3	11/4/2010	16 15	2 62E+C3	2 82E+C2	1 13E+02	3 79E-0:	5 81E-0:	6 42E-01	3 42E+00	9 88E+0(	1 17E-01	-1 80E+0C	1 15E+01	1 26E+01	NA	NA	NA	
MW-36-41	001	37	-25 2	2/10/2006	11 10	4 75E+C4	1 24E+C4	6 88E+02	NA	Na	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	MW-36-41
	002	37	-25 2	2/27/2006	13 45	4 58E+C4	1 22E+C4	6 36E+02	NA	Na	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	003	37	-25 2	3/24/2006	12 45	5 52E+C4	4 65E+C3	1 86E+03	3 48E+00	5 46E-0:	4 16E-01	-5 91E+00	1 39E+01	1 45E-01	2 97E-00	1 53E+01	1 74E+01	4 87E+01	1 65E+01	1 65E+01	
	004	37	-25 2	4/5/2006	12 55	NA	NA	NA	3 53E+00	6 24E-0:	5 02E-01	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	005	37	-25 2	6/5/2006	11 30	2 05E+C4	3 17E+C3	6 01E+02	2 30E+00	6 59E-0:	6 10E-01	-3 37E+00	1 27E+01	1 33E-01	6 21E-02	1 03E+01	1 13E+01	NA	NA	NA	
	006	37	-25 2	8/28/2006	10 10	2 01E+C4	3 09E+C3	6 45E+02	Na	Na	Na	1 96E+00	4 15E+0(	5 22E-0C	-2 78E-01	3 55E+00	3 78E+00	NA	NA	NA	
	007	37	-25 2	6/27/2007	12 30	6 11E+C3	3 50E+C2	1 74E+02	2 18E+00	1 17E+00	9 35E-01	4 30E-01	4 61E+0(	1 74E-00	1 35E+00	2 91E+00	3 67E+00	NA	NA	NA	
	008	37	-25 2	5/1/2009	14 40	1 13E+C4	7 20E+C2	1 54E+02	4 38E+00	1 14E+00	7 31E-01	-2 59E-0:	6 14E+0(	4 09E-00	1 04E-01	3 03E+00	3 26E+00	NA	NA	NA	
	009	37	-25 2	8/4/2009	14 29	1 01E+C4	5 64E+C2	1 57E+02	7 12E+00	1 34E+00	7 74E-01	3 64E+00	6 52E+0(	7 03E 00	7 15E 00	7 15E+00	9 63E+00	NA	NA	NA	
	010	37	-25 2	10/28/2C09	16 14	1 01E+C4	4 29E+C2	1 57E+02	5 14E+00	1 19E+00	7 9?E-01	-2 95E-0:	4 17E+0(	4 70E 00	1 79E 00	4 52E+00	5 37E+00	NA	NA	NA	
	011	37	-25 2	2/1/2010	12 25	9 56E+C3	1 30E+C3	6 26E+02	4 50E+00	9 53E-0.	4 44E-01	1 66E+00	4 23E+0(	4 78E-0C	0 00E-00	4 35E+00	5 7.E+00	NA	NA	NA	
	012	37	-25 2	4/28/2010	15 38	1 56E+C4	6 89E+C2	1 50E+02	5 55E+00	1 30E+00	5 74E-01	1 28E+00	6 45E+0(	6 92E-0C	8 55E-01	5 7.E+00	6 68E+00	NA	NA	NA	
	013	37	-25 2	7/29/2010	12 23	1 30E+C4	7 52E+C2	1 46E+02	1 38E+00	7 41E-0:	5 17E-01	-1 34E+00	6 35E+0(	6 48E-0C	4 07E-00	5 12E+00	7 75E+00	NA	NA	NA	
	014	37	-25 2	11/4/2010	16 55	1 22E+C4	5 75E+C2	1 10E+02	3 54E+00	9 13E-0:	6 12E-01	7 62E-01	8 76E+0(	1 01E-01	3 09E+00	8 53E+00	1 06E+01	NA	NA	NA	
MW-36-52	001	49 7	-37 9	2/10/2006	10 30	2 24E+C4	8 55E+C3	6 38E+02	NA	Na	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	MW-36-52
	002	49 7	-37 9	2/27/2006	12 05	2 57E+C4	9 14E+C3	6 36E+02	NA	Na	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	003	49 7	-37 9	3/24/2006	16 00	2 68E+C4	3 47E+C3	1 87E+03	4 11E+00	5 56E-0:	5 14E-01	4 47E+00	9 6?E+0(	1 04E-01	-2 47E+0C	9 69E+00	1 03E+01	1 18E+01	1 44E+01	1 54E+01	
	004	49 7	-37 9	4/5/2006	14 30	NA	NA	NA	5 31E+00	7 73E-0:	6 76E-01	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	005	49 7	37 9	6/5/2006	11 30	2 40E+C4	3 68E+C3	6 10E+02	4 12E+00	8 33E 0:	5 53E 01	3 09E+00	1 C5E+01	1 21E-01	4 80E 01	1 01E+01	1 15E+01	NA	NA	NA	
	006	49 7	-37 9	8/28/2006	10 00	1 41E+C4	2 19E+C3	5 35E+02	Na	Na	Na	4 0?E-01	6 42E+0(	7 3?E-0C	-2 69E-01	5 23E+00	5 69E+00	NA	NA	NA	
	007	49 7	-37 9	6/27/2007	11 45	1 01E+C4	4 89E+C2	1 95E+02	2 52E+00	1 09E+00	3 38E-01	-3 82E-0:	2 77E+0(	2 99E-0C	9 25E-01	2 6?E+00	3 14E+00	NA	NA	NA	
	008	49 7	-37 9	8/8/2007	14 15	1 25E+C4	1 24E+C3	4 50E+02	2 56E+00	1 00E+00	2 32E-01	1 20E+00	2 5?E+0(	3 51E-0C	-8 82E-01	3 51E+00	3 55E+00	4 2.E+00	2 14E+01	2 47E+01	
	009	49 7	-37 9	1/23/2008	14 13	1 13E+C4	4 47E+C2	1 71E+02	4 35E+00	9 59E-0:	4 24E-01	-2 89E-0:	2 C1E+0(	2 25E-0C	4 08E-01	1 8?E+00	2 20E+00	NA	NA	NA	
	010	49 7	-37 9	7/24/2008	16 00	1 26E+C4	7 66E+C2	3 74E+02	5 57E+00	7 42E-0:	4 73E-01	-4 79E-0:	2 24E+0(	3 69E-0C	2 77E-02	2 1?E+00	3 53E+00	NA	NA	NA	
	011	49 7	-37 9	1/10/2C08	16 53	1 10E+C4	4 40E+C2	1 53E+02	8 27E+00	1 24E+00	3 39E-01	-3 85E-0:	3 66E+0(	4 21E-0C	1 35E-00	4 67E+00	5 65E+00	NA	NA	NA	
	012	49 7	-37 9	1/22/2009	12 59	6 79E+C3	6 03E+C2	2 06E+02	3 37E+00	8 99E-0:	6 07E-01	-6 07E-0:	2 56E+0(	3 24E-0C	1 65E-00	3 24E+00	4 05E+00	NA	NA	NA	
	013	49 7	-37 9	5/1/2009	15 07	6 06E+C3	5 33E+C2	1 53E+02	2 40E+00	7 82E-0:	5 20E-01	2 41E+00	7 13E+0(	4 75E-0C	1 70E-00	4 25E+00	5 17E+00	NA	NA	NA	
	014	49 7	-37 9	8/4/2009	17 02	8 61E+C3	5 30E+C2	1 52E+02	4 70E+00	1 05E+00	5 30E-01	1 90E-01	7 66E+0(	6 96E-0C	-1 47E+0C	7 25E+00	7 05E+00	NA	NA	NA	
	015	49 7	-37 9	10/28/2C09	15 39	8 23E+C3	3 92E+C2	1 57E+02	3 51E+00	1 05E+00	6 31E-01	1 28E+00	4 38E+0(	4 98E-0C	3 63E-00	4 05E+00	5 13E+00	NA	NA	NA	
	016	49 7	37 9	2/1/2010	15 28	5 97E+C3	1 03E+C3	6 42E+02	2 12E+00	6 87E 0:	4 50E 01	3 34E+00	6 50E+0(	6 30E-0C	1 10E+0C	3 7?E+00	4 07E+00	NA	NA	NA	
	017	49 7	-37 9	4/28/2010	15 46	8 49E+C3	5 09E+C2	1 47E+02	5 36E+00	1 35E+00	6 35E-01	2 29E+00	5 51E+0(	6 27E-0C	2 98E-00	4 8?E+00	6 12E+00	NA	NA	NA	
	018	49 7	-37 9	7/29/2010	12 24	7 07E+C3	4 46E+C2	1 30E+02	-1 52?-01	6 33E-0:	8 23E-01	-1 63E+00	7 79E+0(	8 33E-0C	-1 74E+0C	9 63E+00	1 03E+01	NA	NA	NA	
	019	49 7	-37 9	11/4/2010	15 55	7 08E+C3	4 40E+C2	1 10E+02	4 45E+00	1 11E+00	6 76E-01	1 5?E-01	5 59E+0(	6 52E-0C	-2 28E+0(	7 92E+00	7 79E+00	NA	NA	NA	
MW-37-22	001	17	-2	2/24/2006	9 50	1 07E+C4	5 92E+C3	6 39E+02	NA	Na	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	MW-37-22

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Table 5 - Historic Groundwater Analytical Results.xlsx;
Table5

See Page 32 for Notes

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	
MW-37-22	002	17	-2	2/28/2006	10:20	1.28E+04	2.03E+03	1.31E+03	2.37E+00	8.91E-01	8.44E-01	2.41E+00	1.52E+01	1.95E-01	3.60E-00	1.53E+01	1.77E+01	4.24E+01	1.46E+01	1.47E+01	MW-37-22
	002	17	-2	2/28/2006	10:20	NA	NA	NA	2.40E+00	9.10E-01	9.16E-01	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	003	17	-2	3/10/2006	10:35	2.32E+04	2.57E+03	1.28E+03	4.70E+00	9.84E-01	7.37E-01	4.61E+00	1.46E+01	1.63E-01	5.65E-00	1.33E+01	1.57E+01	2.08E+01	1.27E+01	1.33E+01	
	004	17	-2	3/27/2006	10:35	3.49E+04	3.78E+03	1.31E+03	4.35E+00	8.76E-01	6.97E-01	9.75E-01	4.68E+00	5.21E-00	7.46E-01	4.43E+00	4.97E+00	5.43E+01	1.53E+01	1.52E+01	
	005	17	-2	6/27/2006	10:25	1.05E+04	8.55E+02	3.40E+02	9.57E+00	1.20E+00	7.37E-01	3.20E+00	6.52E+00	8.00E-00	-8.05E-01	5.94E+00	7.43E+00	NA	NA	NA	
	006	17	-2	9/29/2006	9:30	7.37E+03	1.27E+03	3.76E+02	1.47E+00	1.80E+00	9.01E-01	-3.84E-02	8.51E+00	9.49E-00	-1.03E+00	7.63E+00	7.69E+00	NA	NA	NA	
	007	17	2	6/27/2007	10:50	4.05E+03	3.35E+02	1.94E+02	1.19E+01	2.13E+00	8.72E-01	2.26E+00	4.68E+00	3.50E-00	1.12E+00	3.21E+00	3.34E+00	NA	NA	NA	
	008	17	-2	9/7/2007	10:55	2.79E+03	2.69E+02	1.39E+02	1.33E+01	2.07E+00	8.57E-01	2.74E+00	3.23E+00	4.22E-00	4.23E-01	3.07E+00	3.54E+00	NA	NA	NA	
	009	17	-2	10/15/2007	14:30	2.26E+03	2.22E+02	1.59E+02	2.29E+01	2.28E+00	4.57E-01	1.33E+00	3.25E+00	3.78E-00	-1.42E+00	3.44E+00	3.44E+00	NA	NA	NA	
	010	17	-2	1/23/2008	10:42	6.92E+03	5.94E+02	1.71E+02	8.15E+00	1.21E+00	4.53E-01	-2.09E+00	2.56E+00	2.86E-00	2.54E-01	3.03E+00	3.49E+00	NA	NA	NA	
	011	17	-2	7/24/2008	11:20	4.33E+03	2.28E+02	1.95E+02	1.22E+01	1.25E+00	7.14E-01	4.32E-01	2.13E+00	3.66E-00	2.97E-00	2.57E+00	4.83E+00	NA	NA	NA	
	012	17	-2	1/10/2008	12:20	2.68E+03	3.92E+02	1.74E+02	1.30E+01	1.38E+00	4.38E-01	2.81E+00	4.56E+00	5.96E-00	-2.85E-01	4.53E+00	4.88E+00	NA	NA	NA	
	013	17	-2	1/21/2009	14:27	5.27E+03	5.36E+02	2.05E+02	8.31E+00	1.33E+00	6.79E-01	-3.12E-01	3.02E+00	3.27E-00	-2.03E+00	3.09E+00	2.82E+00	NA	NA	NA	
	014	17	-2	5/1/2009	12:16	3.85E+03	7.92E+02	4.73E+02	9.37E+00	1.37E+00	4.31E-01	1.09E+00	7.64E+00	5.09E-00	-8.00E-01	5.43E+00	5.74E+00	NA	NA	NA	
	015	17	-2	7/23/2009	14:40	4.70E+03	4.97E+02	2.27E+02	1.21E+01	1.56E+00	4.27E-01	4.22E-02	3.86E+00	4.38E-00	-1.57E+00	3.54E+00	3.56E+00	NA	NA	NA	
	016	17	-2	10/28/2009	11:39	4.65E+03	2.90E+02	1.52E+02	1.74E+01	1.41E+00	4.36E-01	-5.10E-02	5.66E+00	6.40E-00	-3.95E-01	5.47E+00	6.70E+00	NA	NA	NA	
	017	17	-2	1/29/2010	15:24	5.54E+03	9.63E+02	4.47E+02	1.22E+01	1.45E+00	4.37E-01	9.10E-01	3.89E+00	4.49E-00	-4.43E-01	4.51E+00	4.99E+00	NA	NA	NA	
	018	17	2	4/27/2010	13:23	9.06E+03	4.26E+02	2.09E+02	1.29E+01	1.68E+00	6.11E-01	1.08E+00	5.73E+00	5.64E-00	1.31E-00	4.41E+00	5.29E+00	NA	NA	NA	
	019	17	-2	8/5/2010	14:06	3.70E+03	3.26E+02	9.90E+01	5.19E+00	1.59E+00	9.19E-01	-1.60E+00	7.62E+00	8.20E-00	4.53E-00	7.13E+00	9.76E+00	NA	NA	NA	
	020	17	-2	11/4/2010	14:28	4.46E+03	3.57E+02	1.12E+02	1.38E+01	1.33E+00	5.33E-01	-2.26E+00	7.33E+00	7.68E-00	-1.24E+00	9.31E+00	1.00E+01	NA	NA	NA	
MW-37-52	002	29	-14	2/28/2006	12:00	2.86E+04	2.73E+03	1.32E+03	1.78E+01	1.49E+00	2.22E+00	1.27E+01	1.53E+01	2.11E-01	1.50E-01	1.93E+01	2.20E+01	3.41E+01	1.46E+01	1.48E+01	MW-37-52
	002	29	-14	2/28/2006	12:00	NA	NA	NA	1.32E+01	1.72E+00	2.28E+00	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	003	29	-14	3/10/2006	12:50	2.83E+04	2.79E+03	1.28E+03	1.52E+01	1.39E+00	1.90E+00	1.43E+01	1.59E+01	1.78E-01	1.51E-00	1.51E+01	1.65E+01	1.13E+01	1.26E+01	1.34E+01	
	004	29	-14	3/27/2006	11:10	1.39E+04	2.61E+03	1.72E+03	1.35E+01	1.59E+00	2.44E+00	1.10E+00	4.72E+00	5.25E-00	-8.50E-01	4.41E+00	4.80E+00	6.09E+00	1.40E+01	1.51E+01	
	005	29	-14	6/27/2006	9:15	7.92E+03	6.63E+02	2.99E+02	2.38E+01	2.64E+00	3.72E+00	-2.37E-01	5.24E+00	6.07E-00	-2.02E-01	4.75E+00	5.78E+00	NA	NA	NA	
	006	29	-14	9/29/2006	10:15	1.15E+04	1.88E+03	4.54E+02	1.53E+01	1.80E+00	1.91E+00	-3.21E+00	8.58E+00	8.67E-00	2.51E-00	8.73E+00	1.06E+01	NA	NA	NA	
	001	29	-14	2/24/2007	10:55	3.01E+04	9.93E+03	6.39E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	007	29	14	6/27/2007	12:20	3.13E+03	3.05E+02	1.93E+02	1.35E+01	2.37E+00	2.31E+00	1.49E+00	3.66E+00	3.38E-00	1.63E-00	3.33E+00	4.14E+00	NA	NA	NA	
	008	29	-14	9/7/2007	10:56	3.01E+03	2.97E+02	1.37E+02	1.39E+01	2.02E+00	2.36E+00	1.99E+00	3.10E+00	3.83E-00	1.03E-00	3.13E+00	4.01E+00	NA	NA	NA	
	009	29	-14	10/15/2007	14:36	2.49E+03	2.30E+02	1.59E+02	2.13E+01	2.19E+00	2.66E+00	8.79E-01	4.61E+00	4.81E-00	2.53E-00	3.73E+00	4.70E+00	NA	NA	NA	
	010	29	-14	1/23/2008	11:03	6.76E+03	5.57E+02	1.70E+02	1.52E+01	1.59E+00	5.55E-01	1.09E+00	2.70E+00	3.16E-00	-5.52E-02	2.72E+00	2.55E+00	NA	NA	NA	
	011	29	-14	7/24/2008	12:28	5.16E+03	2.45E+02	1.95E+02	2.36E+01	1.51E+00	8.53E-01	-4.08E-01	1.58E+00	2.18E-00	-1.46E-01	2.04E+00	2.58E+00	NA	NA	NA	
	012	29	-14	1/10/2008	12:20	2.89E+03	4.01E+02	1.71E+02	1.36E+01	1.95E+00	3.99E-01	1.71E+00	5.33E+00	6.24E-00	4.09E-01	5.37E+00	6.14E+00	NA	NA	NA	
	013	29	-14	1/21/2009	14:30	3.76E+03	4.61E+02	2.34E+02	1.11E+01	1.49E+00	6.27E-01	1.59E+00	2.64E+00	3.40E-00	-7.12E-01	3.32E+00	3.49E+00	NA	NA	NA	
	014	29	-14	5/1/2009	12:13	4.83E+03	8.66E+02	4.72E+02	1.72E+01	1.80E+00	6.54E-01	-2.55E+00	7.43E+00	4.95E-00	1.24E-01	3.65E+00	4.12E+00	NA	NA	NA	
	015	29	-14	7/23/2009	15:07	5.48E+03	5.28E+02	2.25E+02	2.38E+01	2.17E+00	6.75E-01	-6.50E-01	3.35E+00	3.66E-00	-1.22E+00	3.13E+00	3.12E+00	NA	NA	NA	
	016	29	-14	10/28/2009	11:37	4.56E+03	2.08E+02	1.51E+02	2.20E+01	2.04E+00	7.31E-01	-3.69E+00	7.75E+00	7.99E-00	2.12E-01	4.67E+00	5.38E+00	NA	NA	NA	
	017	29	-14	1/29/2010	15:43	5.69E+03	1.05E+03	6.73E+02	2.33E+01	1.99E+00	4.73E-01	1.64E+00	3.51E+00	3.99E-00	-5.67E-01	3.75E+00	4.02E+00	NA	NA	NA	
	018	29	-14	4/27/2010	17:25	7.24E+03	3.90E+02	2.10E+02	1.37E+01	2.20E+00	6.59E-01	6.05E-01	5.67E+00	6.72E-00	-2.27E+00	4.03E+00	4.69E+00	NA	NA	NA	
	019	29	-14	9/5/2010	14:00	4.00E+03	3.69E+02	9.97E+01	1.41E+01	1.95E+00	5.42E-01	-5.90E+00	0.09E+00	0.07E-00	-3.93E-01	3.67E+00	9.54E+00	NA	NA	NA	
	020	29	-14	11/4/2010	13:14	5.99E+03	4.22E+02	1.17E+02	-2.91E-01	6.15E-01	7.91E-01	-4.11E+00	7.41E+00	7.07E-00	1.54E-00	7.65E+00	9.04E+00	NA	NA	NA	
MW-37-40	001	39.2	-24.2	2/24/2006	11:55	1.68E+04	1.41E+03	6.39E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	MW-37-40
	002	39.2	-24.2	2/28/2006	11:40	1.47E+04	2.13E+03	1.32E+03	3.36E+00	1.23E+00	1.29E+00	1.79E+01	1.71E+01	1.96E-01	1.53E-00	1.64E+01	1.81E+01	5.65E+01	1.65E+01	1.61E+01	
	002	39.2	-24.2	2/28/2006	11:40	NA	NA	NA	4.91E+00	1.23E+00	1.08E+00	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	003	39.2	-24.2	3/10/2006	10:25	1.70E+04	2.30E+03	1.29E+03	1.35E+01	1.32E+00	7.38E-01	5.51E+00	1.45E+01	1.62E-01	1.99E-00	1.47E+01	1.62E+01	1.24E+01	1.35E+01	1.44E+01	
	004	39.2	-24.2	3/27/2006	11:55	1.56E+04	2.02E+03	1.32E+03	1.11E+01	1.12E+00	5.90E-01	3.34E+00	6.14E+00	5.43E-00	4.03E-00	4.71E+00	5.39E+00	6.37E+00	1.35E+01	1.47E+01	
	006	39.2	-24.2	6/27/2006	10:15	1.42E+04	1.13E+03	3.89E+02	2.44E+01	1.71E+00	7.38E-01	8.68E+00	7.68E+00	9.25E-00	-4.36E+00	5.73E+00	6.60E+00	NA	NA	NA	
	007	39.2	-24.2	6/27/2007	11:00	6.85E+03	3.99E+02	1.93E+02	4.59E+00	1.14E+00	8.47E-01	5.92E-01	3.36E+00	3.91E-00	-1.17E+00	3.15E+00	3.27E+00	NA	NA	NA	
	008	39.2	24.2	8/7/2007	13:45	5.85E+03	3.50E+02	1.88E+02	9.76E+00	1.51E+00	6.27E-01	1.10E+00	3.12E+00	3.71E-00	2.48E-01	3.35E+00	3.70E+00	NA	NA	NA	
	009	39.2	-24.2	10/15/2007	15:00	5.69E+03	3.03E+02	1.59E+02	5.30E+00	1.20E+00	7.40E-01	7.03E-01	2.51E+00	3.30E-00	5.59E-01	2.02E+00	3.32E+00	NA	NA	NA	
	010	39.2	-24.2	2/1/2008	17:20	6.73E+03	3.17E+02	1.33E+02	9.48E-01	8.54E-01	8.45E-01	3.09E-01	2.63E+00	2.93E-00	-3.70E-01	2.73E+00	2.94E+00	-4.35E+00	1.46E+01	1.76E+01	
	011	39.2	-24.2	7/24/2008	13:12	5.24E+03	2.43E+02	1.91E+02	1.31E+01	4.41E-01	5.07E-01	-1.10E+00	1.52E+00	2.48E-00	-1.52E+00	2.11E+00	2.70E+00	NA	NA	NA	
	012	39.2	-24.2	1/10/2008	16:17	5.49E+03	5.45E+02	1.76E+02	1.13E+01	5.31E-01	3.33E-01	3.61E-01	6.63E+00	6.83E-00	5.04E-00	7.42E+00	9.22E+00	NA	NA	NA	
	013	39.2	-24.2	1/22/2009	13:05	4.91E+03	5.13E+02	2.00E+02	3.47E+00	8.85E-01	5.59E-01	-2.64E+00	3.78E+00	3.27E-00	2.67E-00	3.14E+00	4.08E+00	NA	NA	NA	
	014	39.2	-24.2	5/1/2009	14:15	4.38E+03	8.33E+02	4.73E+02	1.11E+01	5.15E-01	3.77E-01	-2.89E-01	7.70E+00	5.13E-00	2.74E-00	5.21E+00	6.44E+00	NA	NA	NA	
	015	39.2	-24.2	7/23/2009	14:16	4.22E+03	4.74E+02	2.26E+02	1.19E+01	1.39E+00	3.48E-01	-1.35E-01	3.59E+00	4.50E-00	-3.89E-01	3.12E+00	3.38E+00	NA	NA	NA	
	016	39.2	-24.2	10/28/2009	13:48	4.52E+03	2.88E+02	1.52E+02	1.59E+01	1.75E+00	7.12E-01	2.63E+00	6.40E+00	7.65E-00	3.10E-00	5.72E+00	8.29E+00	NA	NA	NA	
	017	39.2	-24.2	1/29/2010	17:52	4.70E+03	8.89E+02	4.33E+02	1.35E+01	1.44E+00	4.79E-01	7.58E-01	5.10E+00	5.66E-00	-1.29E+00	4.98E+00	5.38E+00	NA	NA	NA	
	018	39.2	-24.2	4/27/2010	12:43	5.37E+03	3.45E+02	2.07E+02	1.71E+01	1.91E+00	6.52E-01	-2.56E+00	4.54E+00	4.41E-00	-7.35E-02	5.03E+00	5.51E+00	NA	NA	NA	
	019	39.2	24.2	8/5/2010	14:25	7.00E+03	4.43E+02	9.99E+01	1.13E+01	1.71E+00	4.21E-01	3.15E-01	7.86E+00	9.00E-00	3.82E+00	7.41E+00	9.31E+00	NA	NA	NA	
	020	39.2	-24.2	11/4/2010	12:06	6.41E+03	4.29E+02	1.15E+02	1.38E+01	1.92E+00	6.32E-01	2.77E+00	8.58E+00	1.03E-01	-2.01E+00	8.29E+00	8.39E+00	NA	NA	NA	
MW-37-57	001	53.2	-38.2	2/24/2006	10:30	1.60E+04	7.22E+03	6.39E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	MW-37-57
	002	53.2	-38.2	2/28/2006	13:35	NA	NA	NA	2.27E+01	2.00E+00	1.02E+00	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	002	53.2	-38.2	2/28/2006	13:35	1.33E+04	2.06E+00	1.32E+03	2.22E+01	1.75E+00	1.05E+00	1.81E+00	2.14E+01	2.44E-01	5.22E-00	1.82E+01	2.14E+01	2.91E+01	1.50E+01	1.54E+01	

See Page 32 for Notes

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	
MW-37-57	003	53.2	-38.2	3/10/2006	11:45	1.91E+04	2.40E+03	1.29E+03	2.29E+01	1.74E+00	7.38E-01	1.46E+00	1.76E+01	1.77E-01	7.74E-00	1.53E+01	1.73E+01	1.04E+01	1.35E+01	1.43E+01	MW-37-57
	004	53.2	-38.2	3/27/2006	13:55	1.59E+04	2.04E+03	1.81E+03	1.55E+01	1.38E+00	6.50E-01	2.52E+00	5.25E+00	5.80E-00	3.94E-00	4.85E+00	5.53E+00	3.71E+00	1.37E+01	1.45E+01	
	005	53.2	-38.2	6/27/2006	9:35	4.48E+04	3.42E+03	6.83E+02	2.73E+01	1.39E+00	8.18E-01	NA	NA	NA	2.04E-00	5.77E+00	6.52E+00	NA	NA	NA	
	006	53.2	-38.2	9/29/2006	10:40	1.05E+04	1.74E+03	4.52E+02	1.31E+01	1.38E+00	7.37E-01	-3.39E+00	8.04E+00	7.81E-00	2.60E-00	8.85E+00	1.07E+01	NA	NA	NA	
	007	53.2	-38.2	6/27/2007	12:20	5.89E+03	3.89E+02	1.95E+02	2.42E+01	3.03E+00	8.34E-01	2.45E+00	3.51E+00	4.32E-00	-9.58E-02	4.67E+00	4.84E+00	NA	NA	NA	
	008	53.2	-38.2	8/7/2007	12:55	6.68E+03	3.68E+02	1.88E+02	2.43E+01	2.15E+00	5.31E-01	-1.35E+00	3.77E+00	3.47E-00	-3.64E-02	3.85E+00	4.33E+00	NA	NA	NA	
	009	53.2	-38.2	10/15/2007	15:00	4.89E+03	2.85E+02	1.58E+02	2.78E+01	2.49E+00	5.53E-01	3.62E-01	2.67E+00	2.72E-00	1.20E-01	2.41E+00	2.77E+00	NA	NA	NA	
	010	53.2	-38.2	2/1/2008	16:31	6.63E+03	3.14E+02	1.33E+02	2.39E+01	3.30E+00	9.82E-01	-9.11E-01	3.72E+00	3.63E-00	-2.93E-01	3.12E+00	3.45E+00	2.47E-01	1.46E+01	1.71E+01	
	011	53.2	-38.2	7/24/2008	13:20	5.33E+03	2.47E+02	1.94E+02	2.12E+01	1.46E+00	5.27E-01	-7.11E-01	1.88E+00	3.07E-00	-1.17E+00	2.13E+00	3.24E+00	NA	NA	NA	
	012	53.2	-38.2	1/10/2008	11:04	4.21E+03	4.71E+02	1.71E+02	2.40E+01	2.29E+00	6.36E-01	-1.51E-01	6.08E+00	6.80E-00	9.78E-01	7.18E+00	8.14E+00	NA	NA	NA	
	013	53.2	-38.2	1/21/2009	14:22	5.04E+03	5.21E+02	2.22E+02	1.99E+01	1.97E+00	6.38E-01	3.77E-02	3.44E+00	3.80E-00	1.05E+00	3.71E+00	4.35E+00	NA	NA	NA	
	014	53.2	-38.2	5/1/2009	12:39	5.94E+03	5.24E+02	1.51E+02	2.49E+01	2.15E+00	5.59E-01	-2.83E-02	7.56E+00	5.04E-00	5.79E-01	4.89E+00	5.60E+00	NA	NA	NA	
	015	53.2	-38.2	7/23/2009	15:12	4.05E+03	4.61E+02	2.22E+02	3.17E+01	2.46E+00	6.47E-01	9.63E-01	3.07E+00	3.68E-00	3.34E-01	3.17E+00	3.55E+00	NA	NA	NA	
	016	53.2	-38.2	10/28/2009	12:00	4.20E+03	2.81E+02	1.52E+02	2.38E+01	2.38E+00	8.37E-01	1.78E+00	5.64E+00	6.92E-00	-1.29E-01	5.51E+00	7.24E+00	NA	NA	NA	
	017	53.2	-38.2	1/29/2010	15:43	5.07E+03	9.08E+02	4.31E+02	1.76E+01	1.80E+00	4.25E-01	1.11E+00	4.16E+00	4.74E-00	5.45E-01	3.92E+00	4.50E+00	NA	NA	NA	
	018	53.2	-38.2	4/27/2010	17:28	5.20E+03	3.50E+02	2.16E+02	1.30E+01	2.15E+00	6.50E-01	-5.03E+00	7.63E+00	7.74E-00	1.71E-00	5.44E+00	7.85E+00	NA	NA	NA	
	019	53.2	-38.2	8/5/2010	13:59	7.30E+03	4.52E+02	9.94E+01	1.73E+01	1.69E+00	5.57E-01	-2.16E+00	7.37E+00	7.75E-00	-6.93E-01	8.95E+00	9.77E+00	NA	NA	NA	
	020	53.2	38.2	11/4/2010	13:49	6.72E+03	4.41E+02	1.15E+02	1.77E+01	2.15E+00	5.70E-01	6.32E+00	1.52E+01	9.04E-00	3.60E+00	7.95E+00	7.35E+00	NA	NA	NA	
MW-38	002	25.4	-11.1	12/8/2005	10:30	9.85E+02	4.38E+02	4.54E+02	-4.38E+00	9.29E+00	1.25E+01	2.93E+00	8.80E+00	6.57E-00	2.99E-00	8.95E+00	7.06E+00	NA	NA	NA	MW-38
	003	25.4	-11.1	12/30/2005	11:50	2.50E+03	4.29E+02	4.71E+02	NA	NA	NA	2.84E+00	8.51E+00	6.39E-00	2.81E-00	8.43E+00	6.71E+00	NA	NA	NA	
	004	25.4	-11.1	1/10/2006	13:50	1.01E+03	4.50E+02	4.56E+02	NA	NA	NA	3.11E+00	1.11E+01	8.02E-00	3.55E-00	1.05E+01	8.02E+00	NA	NA	NA	
	005	25.4	-11.1	1/19/2006	13:15	7.58E+02	4.29E+02	4.51E+02	NA	NA	NA	3.13E+00	9.38E+00	7.14E-00	3.71E-00	1.11E+01	8.77E+00	NA	NA	NA	
	006	25.4	-11.1	1/25/2006	12:15	1.44E+03	4.59E+02	4.51E+02	NA	NA	NA	3.67E+00	1.10E+01	8.21E-00	4.18E-00	1.25E+01	9.71E+00	NA	NA	NA	
	007	25.4	-11.1	2/1/2006	13:30	3.39E+02	4.23E+02	4.50E+02	NA	NA	NA	3.06E+00	9.19E+00	6.91E-00	3.03E-00	9.02E+00	7.30E+00	NA	NA	NA	
	008	25.4	-11.1	2/8/2006	11:15	1.88E+02	3.30E+02	3.46E+02	1.35E-01	4.34E-01	5.15E-01	5.29E+00	1.16E+01	1.31E-01	2.41E-00	1.17E+01	1.31E+01	NA	NA	NA	
	009	25.4	-11.1	2/16/2006	10:05	1.47E+02	4.11E+02	4.54E+02	NA	NA	NA	2.91E+00	8.74E+00	6.54E-00	2.48E-00	7.44E+00	6.05E+00	NA	NA	NA	
	010	25.4	-11.1	2/23/2006	13:25	2.63E+03	4.98E+02	4.51E+02	NA	NA	NA	1.97E+00	5.50E+00	4.22E-00	1.88E-00	5.63E+00	4.19E+00	NA	NA	NA	
	011	25.4	11.1	3/3/2006	8:50	3.70E+02	4.71E+02	4.56E+02	NA	NA	NA	2.65E+00	7.54E+00	6.38E-00	4.53E-00	1.35E+01	1.08E+01	NA	NA	NA	
	013	25.4	-11.1	5/22/2006	9:20	7.50E+02	4.11E+02	4.46E+02	1.52E-01	2.30E-01	3.30E-01	3.42E+00	1.13E+01	7.57E-00	3.43E-00	1.02E+01	7.22E+00	NA	NA	NA	
	014	25.4	-11.1	6/21/2006	9:48	7.62E+02	1.77E+02	1.70E+02	NA	NA	NA	5.90E-01	2.10E+00	2.40E-00	1.23E-00	2.07E+00	2.20E+00	NA	NA	NA	
	014	25.4	-11.1	6/21/2006	9:48	9.16E+02	4.88E+02	4.50E+02	-2.66E+00	2.16E+00	2.40E+00	2.12E+00	7.66E+00	5.40E-00	2.53E-00	7.42E+00	5.29E+00	1.10E+00	5.70E+00	6.48E+00	
	015	25.4	-11.1	7/6/2006	12:00	5.93E+02	4.20E+02	4.52E+02	-3.70E-01	4.50E-01	5.20E-01	3.40E+00	1.12E+01	7.70E-00	2.98E-00	8.95E+00	7.41E+00	NA	NA	NA	
	016	25.4	-11.1	8/7/2006	13:23	2.15E+02	1.80E+02	1.74E+02	5.00E-02	6.30E-01	7.10E-01	2.29E+00	6.47E+00	9.51E-00	-7.22E-01	5.93E+00	9.33E+00	2.75E+01	2.94E+01	3.13E+01	
	017	25.4	-11.1	9/5/2006	11:30	3.53E+02	1.86E+02	1.57E+02	-5.30E-01	7.80E-01	8.70E-01	3.81E-01	7.68E+00	8.63E-00	-4.48E-01	5.23E+00	6.42E+00	NA	NA	NA	
	018	25.4	-11.1	10/25/2006	10:38	1.78E+02	4.08E+02	4.50E+02	-7.00E-02	6.50E-01	7.30E-01	3.13E+00	9.38E+00	7.14E-00	3.08E-00	9.25E+00	7.53E+00	NA	NA	NA	
	019	25.4	-11.1	2/12/2007	9:58	2.24E+03	6.00E+02	5.30E+02	-5.10E-01	1.32E+00	1.50E+00	2.73E+00	1.52E+01	2.00E-00	-1.03E+00	1.41E+01	1.80E+00	NA	NA	NA	
	020	25.4	-11.1	8/16/2007	11:30	6.04E+02	1.53E+02	1.44E+02	-9.21E-02	6.92E-01	8.35E-01	1.21E+00	3.07E+00	3.65E-00	2.48E-00	3.01E+00	3.98E+00	NA	NA	NA	
	021	25.4	-11.1	4/22/2009	10:45	2.74E+02	1.67E+02	1.77E+02	3.53E-01	7.50E-01	8.49E-01	-2.57E-01	4.41E+00	2.94E-00	6.51E-01	2.55E+00	2.94E+00	NA	NA	NA	
MW-39-67	001	67	3	5/22/2007	9:53	4.73E+02	1.77E+02	1.31E+02	2.76E+00	0.57E-01	5.71E-01	1.23E-01	1.67E+00	1.05E-00	1.04E-00	1.03E+00	2.08E+00	-3.11E+00	1.06E+01	1.23E+01	MW-39-67
	002	67	3	9/7/2007	16:30	3.25E+02	1.06E+02	1.95E+02	4.70E+00	1.13E+00	6.32E-01	2.59E+00	4.42E+00	3.57E-00	2.42E-01	2.55E+00	2.90E+00	NA	NA	NA	
	003	67	3	1/17/2008	14:35	3.57E+02	1.95E+02	1.83E+02	3.52E+00	1.29E+00	8.53E-01	-1.28E-01	3.17E+00	3.53E-00	1.75E-00	3.63E+00	4.25E+00	NA	NA	NA	
	004	67	3	5/1/2008	13:48	5.13E+02	1.24E+02	1.26E+02	2.21E+00	6.17E-01	6.78E-01	-3.31E-01	1.28E+00	2.53E-00	5.64E-01	1.82E+00	3.12E+00	NA	NA	NA	
	005	67	3	10/23/2008	12:53	4.15E+02	2.01E+02	1.99E+02	3.31E+00	1.12E+00	7.74E-01	-1.28E+00	5.46E+00	5.95E-00	-1.22E-01	5.33E+00	6.06E+00	NA	NA	NA	
	006	67	3	4/9/2009	14:55	3.38E+02	1.67E+02	1.50E+02	3.35E+00	9.58E-01	6.51E-01	-8.30E-01	5.12E+00	3.41E-00	9.19E-01	3.62E+00	4.21E+00	NA	NA	NA	
	007	67	3	11/5/2009	15:11	4.41E+02	1.20E+02	9.84E+01	2.37E+00	7.72E-01	5.32E-01	-6.24E-01	5.07E+00	5.46E-00	2.05E-00	5.21E+00	6.29E+00	NA	NA	NA	
	008	67	3	5/4/2010	15:23	3.79E+02	2.01E+02	2.13E+02	1.26E+00	6.50E-01	6.33E-01	4.66E-01	5.42E+00	6.14E-00	1.30E-00	5.75E+00	7.87E+00	NA	NA	NA	
	009	67	3	7/22/2010	14:26	2.86E+02	1.19E+02	9.90E+01	1.73E+00	6.30E-01	3.30E-01	2.94E+00	6.33E+00	7.80E-00	-5.65E+00	7.25E+00	5.04E+00	NA	NA	NA	
	010	67	3	11/14/2010	16:28	3.74E+02	1.86E+02	3.88E+02	1.36E+00	9.36E-01	1.94E+00	-1.74E+00	3.59E+00	8.40E-00	-3.17E+00	4.38E+00	8.38E+00	NA	NA	NA	
MW 39 84	001	83.5	3.5	5/22/2007	10:38	5.91E+02	1.89E+02	1.29E+02	1.72E+00	7.22E-01	5.57E-01	9.97E-02	1.53E+00	1.69E-00	5.61E-01	1.52E+00	1.81E+00	1.63E+00	9.99E+00	1.15E+01	MW 39 84
	002	83.5	-3.5	9/7/2007	15:30	2.52E+02	1.77E+02	1.91E+02	7.97E-01	7.10E-01	7.30E-01	3.55E-01	3.67E+00	3.44E-00	-1.11E+00	3.52E+00	3.76E+00	NA	NA	NA	
	003	83.5	-3.5	1/17/2008	13:25	1.43E+02	1.70E+02	1.84E+02	1.78E+00	9.47E-01	7.24E-01	-2.74E+00	2.59E+00	2.86E-00	8.36E-01	2.94E+00	3.50E+00	NA	NA	NA	
	004	83.5	-3.5	5/1/2008	14:10	1.50E+02	1.18E+02	1.26E+02	2.23E+00	7.07E-01	8.95E-01	-2.12E-01	2.24E+00	3.67E-00	-2.12E-01	2.24E+00	3.67E+00	NA	NA	NA	
	005	83.5	-3.5	10/23/2008	12:56	2.34E+02	1.88E+02	1.99E+02	1.34E+00	6.90E-01	5.36E-01	1.74E+00	5.58E+00	6.93E-00	1.12E-00	5.93E+00	8.05E+00	NA	NA	NA	
	006	83.5	-3.5	4/9/2009	15:25	1.85E+02	1.48E+02	1.50E+02	2.35E+00	7.71E-01	6.31E-01	-3.39E-01	4.19E+00	2.79E-00	1.63E-00	2.67E+00	3.42E+00	NA	NA	NA	
	007	83.5	-3.5	11/5/2009	15:14	2.42E+02	1.02E+02	9.56E+01	1.11E+00	6.78E-01	6.28E-01	-1.25E+00	1.06E+01	1.16E-01	3.13E-00	5.23E+00	7.74E+00	NA	NA	NA	
	008	83.5	-3.5	5/4/2010	15:32	2.25E+02	1.95E+02	2.12E+02	1.26E+00	6.30E-01	5.52E-01	1.07E+00	5.65E+00	6.81E-00	-2.75E+00	5.73E+00	5.93E+00	NA	NA	NA	
	009	83.5	-3.5	7/22/2010	14:42	3.70E+02	1.30E+02	1.01E+02	8.43E-01	6.21E-01	5.35E-01	-3.32E+00	6.79E+00	6.90E-00	2.43E-00	5.95E+00	8.54E+00	NA	NA	NA	
	010	83.5	-3.5	11/14/2010	16:38	2.51E+02	2.10E+02	4.59E+02	1.30E+00	8.83E-01	1.86E+00	3.78E+00	4.41E+00	1.05E-01	7.47E-00	4.87E+00	1.24E+01	NA	NA	NA	
MW-39-102	001	101.5	-21.5	5/22/2007	10:40	8.05E+02	2.13E+02	1.29E+02	1.32E+00	7.17E-01	6.21E-01	-3.96E-02	1.61E+00	1.99E-00	6.54E-01	1.73E+00	2.11E+00	5.39E-32	1.15E+01	1.32E+01	MW-39-102
	002	101.5	21.5	9/7/2007	14:25	3.21E+02	1.79E+02	1.88E+02	4.71E-01	5.51E-01	5.95E-01	7.53E-01	3.35E+00	3.60E-00	2.47E+00	4.17E+00	4.22E+00	NA	NA	NA	
	003	101.5	-21.5	1/17/2008	13:32	1.54E+02	1.67E+02	1.79E+02	9.88E-01	8.30E-01	7.97E-01	7.42E-01	2.37E+00	2.83E-00	7.91E-01	3.42E+00	2.98E+00	NA	NA	NA	
	004	101.5	-21.5	4/30/2008	14:56	5.03E+02	1.69E+02	2.44E+02	8.03E-01	5.43E-01	7.95E-01	-1.02E+00	2.63E+00	4.00E-00	4.88E-01	1.92E+00	3.34E+00	-1.07E+01	1.40E+01	2.48E+01	
	005	101.5	-21.5	10/22/2008	13:56	1.68E+02	1.85E+02	2.20E+02	1.23E+00	7.18E-01	5.72E-01	6.51E-01	6.18E+00	6.75E-00	-1.50E+00	5.47E+00	5.53E+00	NA	NA	NA	
	006	101.5	-21.5	4/9/2009	15:38	2.20E+02	1.53E+02	1.51E+02	2.40E+00	8.22E-01	6.31E-01	-8.17E-02	5.07E+00	3.38E-00	1.30E-00	3.12E+00	3.80E+00	NA	NA	NA	

See Page 32 for Notes

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	
MW-39-102	007	101 5	-21 5	11/5/2009	15 12	2 67E+02	1 08E+02	9 93E+01	1 24E+00	1 02E+00	1 05E+00	-2 19E+00	6 51E+00	5 89E−00	-4 22E+00	7 23E+00	6 76E+00	NA	NA	NA	MW-39-102
	008	101 5	-21 5	5/4/2010	15 27	3 93E+02	2 01E+02	2 13E+02	4 15E-0:	6 36E-0:	6 37E-01	-2 40E+00	5 49E+00	5 72E−00	-5 18E-01	5 33E+00	6 91E+00	NA	NA	NA	
	009	101 5	-21 5	7/22/2010	14 52	2 39E+02	1 49E+02	1 49E+02	4 35E+00	9 93E-0:	4 71E-01	-1 08E+00	6 35E+00	6 98E−00	-3 68E+00	5 55E+00	4 42E+00	NA	NA	NA	
	010	101 5	-21 5	1/:/15/2C10	16 12	3 61E+02	1 83E+02	3 84E+02	1 40E+00	9 00E-0:	1 93E+00	2 98E+00	3 38E+00	8 21E−00	-4 12E+00	3 52E+00	6 23E+00	NA	NA	NA	
MW-39-124	001	124	-44	5/22/2007	9 50	2 61E+02	1 49E+02	1 31E+02	9 26E-0:	9 70E-0:	1 00E+00	-1 15E-0:	1 64E+00	1 80E−00	-5 31E-01	1 54E+00	1 63E+00	3 55E+00	1 17E+01	1 33E+01	MW-39-124
	002	124	-44	8/7/20C7	13 40	1 97E+02	1 73E+02	1 88E+02	5 90E-0:	8 57E-0:	9 47E-01	-1 14E+00	2 54E+00	3 06E−00	4 37E-01	3 17E+00	3 67E+00	NA	NA	NA	
	003	124	44	1/17/2008	15 40	1 67E+02	1 64E+02	1 73E+02	1 10E+00	9 71E 0:	8 50E 01	6 55E 01	2 61E+00	3 00E−00	9 65E 01	2 03E+00	2 55E+00	NA	NA	NA	
	004	124	-44	4/30/2008	15 24	2 15E102	9 50E101	1 53E102	1 79E100	6 60E-0:	8 21E-01	-1 23E100	2 13E100	3 40E 00	5 07E-01	2 12E100	3 09E100	-1 13E101	1 42E101	2 52E101	
	005	124	-44	10/22/2C08	14 00	2 31E+02	1 88E+02	2 00E+02	9 42E-0:	6 47E-0:	5 54E-01	1 03E+00	6 64E+00	7 61E−00	1 63E−00	5 99E+00	8 11E+00	NA	NA	NA	
	006	124	-44	4/9/20C9	11 46	1 98E+02	1 00E+02	1 00E+02	9 16E-0:	6 35E-0:	6 99E-01	-9 43E-02	5 16E+00	5 44E−00	-1 00E-01	5 53E+00	5 67E+00	NA	NA	NA	
	007	124	-44	11/5/2009	12 56	2 68E+02	1 09E+02	1 00E+02	1 37E+00	8 58E-0:	7 56E-01	-6 47E-0:	5 68E+00	6 55E−00	4 43E−00	7 04E+00	8 98E+00	NA	NA	NA	
	008	124	-44	5/4/2010	12 32	3 08E+02	1 92E+02	2 06E+02	5 90E-0:	8 18E-0:	8 96E-01	-2 76E-02	5 43E+00	5 45E−00	1 35E-02	5 05E+00	5 58E+00	NA	NA	NA	
	009	124	-44	7/22/2010	11 39	1 12E+02	1 34E+02	1 46E+02	2 25E+00	7 71E-0:	5 31E-01	-1 11E+00	8 52E+00	9 28E−00	4 37E-01	9 75E+00	1 10E+01	NA	NA	NA	
	010	124	-44	1/:/15/2C10	12 46	3 73E+02	1 83E+02	3 86E+02	1 17E+00	8 85E-0:	1 93E+00	-6 40E+00	6 71E+00	1 61E−01	-1 31E-01	4 93E+00	1 10E+01	NA	NA	NA	
MW-39-183	001	182 5	-102 5	5/22/2007	10 08	2 47E+02	1 45E+02	1 29E+02	6 51E-0:	8 82E-0:	9 53E-01	6 42E-01	1 88E+00	1 89E−00	3 09E-02	1 53E+00	1 79E+00	0 00E+00	1 09E+01	1 25E+01	MW-39-183
	002	182 5	-102 5	8/7/20C7	12 40	1 88E+02	1 73E+02	1 89E+02	7 11E-0:	8 92E-0:	8 87E-01	1 58E+00	5 12E+00	5 12E−00	2 84E−00	4 55E+00	5 46E+00	NA	NA	NA	
	003	182 5	-102 5	1/17/2008	11 55	4 65E+01	1 56E+02	1 82E+02	8 29E-0:	6 17E-0:	5 82E-01	-3 72E-0:	3 51E+00	3 92E−00	0 00E−00	2 08E+00	2 20E+00	NA	NA	NA	
	004	182 5	102 5	4/30/2008	15 03	1 12E+02	1 06E+02	1 77E+02	1 12E+00	5 66E 0:	7 33E 01	1 45E 01	2 45E+00	4 14E−00	7 55E 01	2 63E+00	4 48E+00	1 85E+00	1 46E+01	2 50E+01	
	005	182 5	-102 5	10/22/2C08	14 07	5 39E+01	1 73E+02	1 97E+02	3 42E-0:	7 29E-0:	8 35E-01	-4 16E+00	6 88E+00	7 09E−00	-3 68E+00	7 77E+00	7 39E+00	NA	NA	NA	
	006	182 5	-102 5	4/9/20C9	11 45	2 60E+01	1 26E+02	1 50E+02	2 13E-0:	6 55E-0:	7 51E-01	3 94E-01	6 71E+00	4 47E−00	6 65E-01	3 77E+00	4 33E+00	NA	NA	NA	
	007	182 5	-102 5	11/5/2009	12 57	9 85E+01	9 25E+01	9 87E+01	3 71E-0:	7 14E-0:	8 05E-01	1 63E+00	9 42E+00	6 01E−00	1 94E−00	5 18E+00	6 46E+00	NA	NA	NA	
	008	182 5	-102 5	5/4/2010	12 51	1 34E+02	1 89E+02	2 10E+02	8 20E-02	5 44E-0:	6 90E-01	2 11E+00	6 52E+00	7 73E−00	-2 38E+00	7 59E+00	6 99E+00	NA	NA	NA	
	009	182 5	-102 5	7/22/2010	11 38	1 07E+02	1 12E+02	1 19E+02	2 08E-0:	4 19E-0:	4 79E-01	-4 62E+00	8 88E+00	9 01E−00	-5 09E+00	9 62E+00	8 98E+00	NA	NA	NA	
	010	182 5	-102 5	1/:/15/2C10	12 53	-8 02E+01	1 61E+02	3 88E+02	4 19E-0:	7 56E-0:	1 07E+00	1 45E+00	4 83E+00	1 10E−01	3 58E−00	4 93E+00	1 19E+01	NA	NA	NA	
MW-39-195	001	195	-115	5/22/2007	12 45	2 55E+02	1 50E+02	1 33E+02	1 30E+00	6 90E-0:	5 59E-01	0 00E+00	7 67E+00	4 34E−00	3 54E-01	4 15E+00	4 82E+00	-2 58E+00	9 95E+00	1 15E+01	MW-39-195
	002	195	-115	8/7/20C7	12 00	2 00E+02	1 70E+02	1 85E+02	5 92E-0:	6 23E-0:	6 55E-01	-4 30E-02	4 14E+00	4 06E−00	-2 76E-01	4 55E+00	4 30E+00	NA	NA	NA	
	003	195	-115	1/17/2008	17 28	9 63E+01	1 64E+02	1 84E+02	8 97E-0:	8 51E-0:	8 48E-01	7 57E-01	4 08E+00	4 05E−00	8 15E-01	3 47E+00	4 01E+00	NA	NA	NA	
	004	195	115	4/30/2008	16 10	2 74E+02	1 50E+02	2 36E+02	1 21E+00	5 52E 0:	8 29E 01	1 17E+00	2 28E+00	3 71E−00	2 23E 02	2 43E+00	4 21E+00	2 59E+00	1 45E+01	2 51E+01	
	005	195	-115	10/22/2C08	14 26	1 72E102	1 03E102	2 20E102	8 01E-0:	7 23E-0:	6 20E-01	4 14E100	5 57E100	6 90E 00	1 01E 00	5 75E100	7 26E100	NA	NA	NA	
	006	195	-115	4/9/20C9	12 08	7 46E+01	1 32E+02	1 48E+02	6 89E-0:	6 50E-0:	7 11E-01	-2 41E-0:	8 63E+00	5 75E−00	-1 64E+00	4 82E+00	5 07E+00	NA	NA	NA	
	007	195	-115	11/5/2009	13 03	1 09E+02	9 55E+01	9 86E+01	4 86E-0:	7 50E-0:	8 55E-01	-2 05E+00	7 08E+00	7 38E−00	-1 11E+00	8 71E+00	9 45E+00	NA	NA	NA	
	008	195	-115	5/4/2010	13 14	6 99E+01	1 64E+02	1 84E+02	6 21E-0:	6 54E-0:	6 32E-01	-1 56E+00	6 42E+00	6 86E−00	-1 59E-01	5 84E+00	7 63E+00	NA	NA	NA	
	009	195	-115	7/22/2010	12 10	9 26E+01	1 11E+02	1 20E+02	5 61E-0:	5 70E-0:	5 97E-01	7 86E-01	8 64E+00	9 43E−00	-9 78E-01	8 93E+00	9 62E+00	NA	NA	NA	
	010	195	-115	1/:/15/2C10	13 25	2 16E+02	1 86E+02	4 29E+02	1 52E-0:	7 35E-0:	1 73E+00	-3 21E+00	4 09E+00	6 54E−00	8 70E−00	4 33E+00	1 20E+01	NA	NA	NA	
MW-40-27	001	25 7	46 5	6/5/20C7	11 00	1 56E+02	1 58E+02	1 53E+02	-7 82E-04	6 48E-0:	8 50E-01	2 70E-02	3 64E+00	3 39E−00	1 48E−00	2 93E+00	3 17E+00	NA	NA	NA	MW-40-27
	002	25 7	46 5	7/23/2007	12 35	1 62E+02	1 59E+02	1 59E+02	3 32E-0:	5 90E-0:	6 52E-01	2 52E+00	3 59E+00	3 88E−00	-5 97E-02	3 45E+00	3 83E+00	NA	NA	NA	
	003	25 7	46 5	/7/2008	16 28	1 44E+02	1 70E+02	1 82E+02	-4 39E-01	4 49E-0:	7 34E-01	-4 17E-0:	1 74E+00	1 87E−00	6 09E-01	1 73E+00	1 99E+00	NA	NA	NA	
	004	25 7	46 5	8/11/2008	13 19	2 22E+02	1 06E+02	1 72E+02	3 66E-0:	4 20E-0:	7 35E-01	6 00E-01	2 28E+00	4 00E−00	-3 72E-01	2 55E+00	3 83E+00	-7 57E+00	1 15E+01	2 05E+01	
	005	25 7	46 5	10/28/2C08	14 50	1 42E102	1 00E102	1 25E102	4 70E-0:	5 34E-0:	6 10E-01	-1 55E100	5 73E100	6 22E 00	-1 46E100	5 05E100	7 41E100	6 20E100	1 64E101	1 85E101	
	006	25 7	45 5	1/19/2009	14 29	1 20E102	1 34E102	1 40E102	4 02E-0:	6 30E-0:	6 32E-01	6 25E-01	3 41E+00	3 06E 00	1 43E 00	2 92E100	3 50E100	-1 03E100	1 00E101	2 09E101	
	007	25 7	45 5	4/13/2009	14 17	1 98E+02	1 45E+02	1 36E+02	-5 35E-01	7 85E-0:	9 35E-01	-1 14E-0:	6 66E+00	4 57E−00	-6 04E-02	3 42E+00	3 8.E+00	-2 30E+00	1 82E+01	2 12E+01	
	008	25 7	45 5	7/20/2009	14 50	1 54E+02	1 94E+02	2 14E+02	2 47E-0:	4 05E-0:	4 49E-01	4 10E+00	8 49E+00	5 96E−00	-1 64E+00	5 54E+00	5 88E+00	NA	NA	NA	
	009	25 7	45 5	1/19/2009	14 57	1 17E+02	9 33E+01	9 75E+01	-6 51E-01	7 14E-0:	8 71E-01	1 06E+00	4 59E+00	5 44E−00	-2 53E+00	5 33E+00	5 10E+00	NA	NA	NA	
	010	25 7	45 5	2/4/2010	14 40	1 30E+02	1 65E+02	1 83E+02	1 10E-0:	4 58E-0:	5 59E-01	-1 62E+00	7 63E+00	6 98E−00	2 85E−00	5 71E+00	8 30E+00	NA	NA	NA	
	011	25 7	46 5	4/15/2010	16 00	1 48E+02	1 74E+02	1 93E+02	1 05E-0:	6 29E-0:	7 95E-01	-1 30E+00	4 02E+00	4 36E−00	-2 58E+00	5 64E+00	4 86E+00	NA	NA	NA	
	012	25 7	46 5	8/26/2010	14 42	1 93E+02	1 26E+02	1 24E+02	2 23E-0:	6 54E-0:	7 73E-01	1 95E+00	4 50E+00	5 46E−00	-1 63E+00	4 72E+00	5 12E+00	NA	NA	NA	
	013	25 7	46 5	1/:/29/2C10	15 23	2 06E+02	1 49E+02	1 44E+02	1 10E-0:	7 98E-0:	9 53E-01	3 16E-01	3 38E+00	3 76E−00	1 01E−00	3 63E+00	4 18E+00	NA	NA	NA	
MW-40-46	001	45 2	27	6/5/20C7	11 50	1 42E+02	1 58E+02	1 56E+02	-3 17E-01	5 82E-0:	8 30E-01	7 90E-01	3 79E+00	3 39E−00	-2 35E+00	2 77E+00	3 27E+00	NA	NA	NA	MW-40-46
	002	45 2	27	7/23/2007	12 15	9 48E+01	1 53E+02	1 71E+02	3 50E 0:	5 51E 0:	6 38E 01	9 08E 0:	3 79E+00	4 09E−00	1 72E+00	3 07E+00	2 90E+00	NA	NA	NA	
	003	45 2	27	10/12/2C07	14 45	-1 59E101	1 52E102	1 74E102	-2 14E-02	5 10E-0:	6 35E-01	-3 30E-0:	3 72E100	3 59E 00	4 54E-01	3 72E100	4 26E100	NA	NA	NA	
	004	45 2	27	/7/2008	14 42	-1 96E+01	1 45E+02	1 80E+02	8 04E-0:	8 55E-0:	8 75E-01	-1 21E+00	2 84E+00	3 00E−00	1 15E−00	2 55E+00	2 82E+00	NA	NA	NA	
	005	45 2	27	8/11/2008	15 55	1 68E+02	1 04E+02	1 71E+02	-3 25E-01	5 71E-0:	8 39E-01	1 25E-01	1 59E+00	1 51E−00	1 09E−00	2 00E+00	3 64E+00	4 06E+00	1 17E+01	2 01E+01	
	006	45 2	27	10/28/2C08	15 30	8 80E+01	1 74E+02	1 98E+02	6 53E-0:	7 22E-0:	7 20E-01	2 82E-01	6 58E+00	7 49E−00	1 83E−00	5 33E+00	7 48E+00	9 34E-01	1 71E+01	1 96E+01	
	007	45 2	27	1/19/2009	14 28	7 76E+01	1 33E+02	1 48E+02	2 69E-0:	5 31E-0:	5 57E-01	8 00E-01	2 88E+00	3 39E−00	-1 19E+00	2 73E+00	2 88E+00	-5 63E+00	1 89E+01	2 22E+01	
	008	45 2	27	4/13/2009	14 40	1 52E+02	1 37E+02	1 36E+02	-1 51E-01	5 21E-0:	7 12E-01	-1 13E+00	6 69E+00	4 59E−00	-2 72E-01	4 01E+00	4 40E+00	-5 37E+00	1 97E+01	2 32E+01	
	009	45 2	27	7/20/2009	15 11	1 48E+02	1 92E+02	2 13E+02	5 87E-0:	5 81E-0:	6 33E-01	-1 03E+00	7 61E+00	7 32E−00	-1 38E+00	5 32E+00	6 66E+00	NA	NA	NA	
	010	45 2	27	1/:/19/2C09	15 07	5 74E+01	8 82E+01	9 32E+01	9 58E-02	5 13E-0:	5 92E-01	-9 97E-0:	4 25E+00	4 70E−00	1 09E−00	4 54E+00	5 35E+00	NA	NA	NA	
	011	45 2	27	5/4/2010	14 59	9 28E+01	1 67E+02	1 89E+02	6 00E-0:	7 76E-0:	7 95E-01	2 03E+00	4 43E+00	5 36E−00	1 37E−00	4 95E+00	5 86E+00	NA	NA	NA	
	012	45 2	27	4/15/2010	16 18	2 35E+02	1 38E+02	1 45E+02	3 98E-0:	7 23E-0:	8 15E-01	2 73E+00	3 30E+00	4 08E−00	1 19E−00	3 43E+00	3 95E+00	NA	NA	NA	
	013	45 2	27	8/26/2010	14 56	1 24E+02	1 22E+02	1 29E+02	1 83E 01	5 11E 0:	7 19E 01	7 02E 01	6 01E+00	6 90E−00	5 48E−00	5 17E+00	8 30E+00	NA	NA	NA	
	014	45 2	27	1/:/29/2C10	16 36	1 03E+02	1 47E+02	1 48E+02	6 00E-02	7 89E-0:	9 38E-01	5 82E-01	3 82E+00	4 28E−00	2 05E−00	3 99E+00	4 74E+00	NA	NA	NA	
MW-40-81	001	80 7	-7 5	6/5/20C7	12 37	1 63E+02	1 59E+02	1 53E+02	-2 93E-02	6 98E-0:	9 11E-01	-1 00E+00	3 09E+00	3 22E−00	-4 00E-03	3 79E+00	3 62E+00	NA	NA	NA	MW-40-81
	002	80 7	-7 5	7/23/2007	13 00	6 95E+01	1 52E+02	1 72E+02	2 45E-0:	6 00E-0:	6 84E-01	-7 38E-0:	4 55E+00	5 20E−00	2 51E−00	3 81E+00	4 95E+00	NA	NA	NA	
	003	80 7	-7 5	10/12/2C07	10 52	6 99E+01	1 53E+02	1 73E+02	-9 65E-02	5 25E-0:	7 10E-01	5 47E-01	4 00E+00	4 48E−00	7 73E-01	4 02E+00	4 64E+00	NA	NA	NA	

See Page 32 for Notes

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	
MW-40-81	004	80.7	-7.5	7/7/2008	14:35	1.09E+02	1.64E+02	1.81E+02	2.07E-01	7.25E-01	8.26E-01	-7.49E-01	2.51E+00	2.38E-00	-2.66E-01	1.77E+00	1.95E+00	NA	NA	NA	MW-40-81
	005	80.7	-7.5	8/11/2008	9:43	2.42E+02	1.06E+02	1.71E+02	1.68E-01	3.55E-01	6.52E-01	-7.84E-02	1.69E+00	2.78E-00	2.60E-01	1.92E+00	3.25E+00	-2.96E+00	1.10E+01	1.92E+01	
	006	80.7	-7.5	10/28/2008	11:20	3.04E+01	1.61E+02	1.93E+02	-1.84E-01	4.17E-01	6.28E-01	2.04E+00	5.28E+00	6.24E-00	-8.66E-01	5.75E+00	7.32E+00	-2.38E+00	2.33E+01	2.69E+01	
	007	80.7	-7.5	1/19/2009	10:38	1.61E+02	1.37E+02	1.48E+02	2.92E-01	5.76E-01	6.54E-01	-4.57E-01	3.62E+00	4.01E-00	-1.41E+00	3.77E+00	3.92E+00	-7.55E+00	1.77E+01	2.09E+01	
	008	80.7	-7.5	4/13/2009	11:06	2.31E+02	1.50E+02	1.35E+02	-3.34E-02	6.47E-01	8.17E-01	-1.98E+00	7.17E+00	4.78E-00	3.78E-00	4.67E+00	6.06E+00	-1.26E+01	2.01E+01	2.42E+01	
	009	80.7	-7.5	7/20/2009	11:28	2.13E+02	1.95E+02	2.14E+02	-2.23E-01	4.35E-01	5.48E-01	-7.78E-01	4.68E+00	5.50E-00	-1.11E+00	5.54E+00	5.96E+00	NA	NA	NA	
	010	80.7	-7.5	1/15/2009	13:51	9.11E+01	9.83E+01	9.45E+01	1.50E-01	6.53E-01	8.17E-01	4.31E+00	6.09E+00	5.16E-00	2.03E-00	3.75E+00	4.81E+00	NA	NA	NA	
	011	80.7	-7.5	2/4/2010	10:56	1.47E+02	1.65E+02	1.33E+02	3.09E-02	6.37E-01	8.10E-01	1.42E+00	4.00E+00	4.69E-00	-7.10E-03	4.05E+00	5.42E+00	NA	NA	NA	
	012	80.7	-7.5	4/15/2010	12:15	1.92E+02	1.37E+02	1.47E+02	4.25E-01	7.32E-01	7.79E-01	1.72E+00	4.20E+00	4.93E-00	1.08E-01	3.82E+00	4.36E+00	NA	NA	NA	
	013	80.7	-7.5	8/26/2010	11:05	9.08E+01	1.14E+02	1.24E+02	2.45E-01	5.25E-01	6.36E-01	-3.95E+00	3.64E+00	4.96E-00	-2.64E+00	4.63E+00	4.20E+00	NA	NA	NA	
	014	80.7	-7.5	1/29/2010	12:03	2.48E+02	1.58E+02	1.47E+02	1.13E-03	6.45E-01	7.35E-01	-9.57E-01	4.38E+00	4.79E-00	-4.37E-01	4.83E+00	5.28E+00	NA	NA	NA	
MW-40-100	001	100.2	-27	6/5/2007	11:15	1.76E+02	1.61E+02	1.54E+02	3.40E-01	6.16E-01	6.84E-01	-1.92E+00	3.06E+00	3.04E-00	-1.98E+00	3.87E+00	3.59E+00	NA	NA	NA	MW-40-100
	002	100.2	-27	7/23/2007	13:20	8.12E+01	1.55E+02	1.75E+02	2.91E-01	6.18E-01	6.96E-01	-4.57E-01	1.51E+00	2.10E-00	1.78E-01	1.94E+00	2.20E+00	NA	NA	NA	
	003	100.2	-27	10/12/2007	11:03	5.95E+01	1.53E+02	1.73E+02	-7.39E-02	5.75E-01	7.59E-01	1.93E+00	3.57E+00	3.87E-00	8.90E-01	3.33E+00	3.61E+00	NA	NA	NA	
	004	100.2	-27	1/7/2008	11:55	1.98E+01	1.52E+02	1.81E+02	-7.69E-02	5.85E-01	8.30E-01	3.13E-01	2.27E+00	2.60E-00	8.84E-02	2.75E+00	2.86E+00	NA	NA	NA	
	006	100.2	-27	5/30/2008	12:45	1.16E+02	9.84E+01	1.50E+02	1.16E-01	5.50E-01	9.31E-01	-7.48E-01	2.12E+00	3.48E-00	-8.73E-01	2.07E+00	3.15E+00	NA	NA	NA	
	007	100.2	-27	8/11/2008	10:10	1.93E+02	1.05E+02	1.71E+02	-3.44E-02	2.85E-01	5.33E-01	-1.10E-01	1.59E+00	2.69E-00	6.30E-01	1.52E+00	2.70E+00	0.00E+00	1.09E+01	1.88E+01	
	008	100.2	-27	10/28/2008	11:30	8.66E+01	1.73E+02	1.75E+02	1.13E-01	6.37E-01	7.33E-01	1.25E+00	6.50E+00	7.11E-00	3.92E-00	7.02E+00	8.63E+00	7.72E-01	1.79E+01	2.06E+01	
	009	100.2	-27	1/19/2009	11:52	4.24E+01	1.30E+02	1.48E+02	1.06E-01	6.03E-01	7.25E-01	6.13E-01	5.57E+00	3.85E-00	1.26E-01	3.11E+00	3.61E+00	-9.80E+00	1.89E+01	2.24E+01	
	010	100.2	-27	4/13/2009	11:07	2.02E+02	1.56E+02	1.35E+02	6.63E-02	5.52E-01	6.32E-01	-2.19E+00	6.60E+00	4.40E-00	-2.09E+00	4.43E+00	4.45E+00	-3.13E-01	1.86E+01	2.17E+01	
	011	100.2	-27	7/20/2009	11:31	1.65E+02	1.97E+02	2.18E+02	-1.75E-01	5.53E-01	7.84E-01	4.36E-01	5.52E+00	6.32E-00	7.15E-01	5.75E+00	6.65E+00	NA	NA	NA	
	012	100.2	-27	1/15/2009	14:34	7.32E+01	9.03E+01	9.89E+01	9.08E-02	6.51E-01	7.90E-01	-1.00E+00	3.72E+00	4.12E-00	-4.90E-01	4.53E+00	4.99E+00	NA	NA	NA	
	013	100.2	-27	2/4/2010	11:10	1.47E+02	1.65E+02	1.32E+02	7.06E-01	7.83E-01	8.35E-01	-7.58E-01	4.26E+00	4.60E-00	-3.34E+00	4.75E+00	4.53E+00	NA	NA	NA	
	014	100.2	-27	4/15/2010	12:16	1.39E+02	1.33E+02	1.46E+02	-1.08E-01	5.37E-01	7.48E-01	-2.83E-01	3.54E+00	3.96E-00	-2.16E+00	5.12E+00	4.80E+00	NA	NA	NA	
	015	100.2	-27	8/26/2010	11:09	1.24E+02	1.37E+02	1.45E+02	-2.33E-01	3.95E-01	6.21E-01	8.87E-01	6.15E+00	7.12E-00	6.51E-01	5.61E+00	6.53E+00	NA	NA	NA	
	016	100.2	-27	1/29/2010	12:12	1.34E+02	1.40E+02	1.46E+02	-2.12E-01	6.70E-01	8.39E-01	-1.46E-01	4.65E+00	4.53E-00	3.11E-01	4.25E+00	4.81E+00	NA	NA	NA	
MW-40-127	001	127.2	-54	6/5/2007	12:55	1.87E+02	1.62E+02	1.53E+02	2.60E-01	5.25E-01	5.71E-01	7.57E-01	2.68E+00	3.41E-00	-5.59E-03	2.94E+00	3.26E+00	NA	NA	NA	MW-40-127
	002	127.2	-54	7/23/2007	15:15	4.26E+01	1.44E+02	1.58E+02	3.03E-01	5.15E-01	5.73E-01	1.17E+00	1.67E+00	1.76E-00	2.04E-01	1.52E+00	1.77E+00	NA	NA	NA	
	003	127.2	-54	10/12/2007	11:30	2.03E+01	1.44E+02	1.54E+02	1.01E-01	4.77E-01	6.34E-01	-2.32E+00	3.00E+00	4.06E-00	-1.51E+00	3.72E+00	3.79E+00	NA	NA	NA	
	004	127.2	-54	1/7/2008	12:30	9.75E+00	1.48E+02	1.79E+02	5.17E-01	6.83E-01	7.23E-01	6.45E-01	2.42E+00	2.77E-00	3.24E-01	2.23E+00	2.59E+00	NA	NA	NA	
	006	127.2	-54	5/30/2008	13:00	5.47E+01	9.16E+01	1.53E+02	-4.84E-01	5.50E-01	9.98E-01	6.92E-01	2.23E+00	3.43E-00	1.35E-00	2.02E+00	3.62E+00	NA	NA	NA	
	007	127.2	-54	8/11/2008	10:34	1.68E+02	1.04E+02	1.70E+02	1.65E-01	2.41E-01	4.19E-01	1.24E-01	1.65E+00	2.81E-00	7.30E-03	1.42E+00	2.51E+00	-8.77E+00	1.15E+01	2.01E+01	
	008	127.2	-54	10/28/2008	12:10	7.53E+01	1.70E+02	1.95E+02	4.36E-01	7.10E-01	7.37E-01	-2.33E+00	6.46E+00	6.88E-00	-4.33E+00	8.23E+00	7.68E+00	0.00E+00	1.66E+01	1.93E+01	
	009	127.2	-54	1/19/2009	11:25	9.22E+01	1.33E+02	1.48E+02	-7.90E-02	7.19E-01	9.30E-01	-1.20E+00	3.75E+00	3.94E-00	1.68E-00	3.65E+00	4.45E+00	-3.34E+00	1.85E+01	2.16E+01	
	010	127.2	-54	4/13/2009	11:24	1.52E+02	1.37E+02	1.36E+02	5.56E-02	6.11E-01	7.56E-01	-1.08E+00	7.16E+00	4.77E-00	-1.39E+00	4.53E+00	4.79E+00	-9.13E+00	1.86E+01	2.22E+01	
	011	127.2	-54	7/20/2009	12:09	1.77E+02	1.98E+02	2.18E+02	3.38E-01	6.30E-01	7.11E-01	-3.30E-02	6.03E+00	6.40E-00	1.15E-00	5.53E+00	6.38E+00	NA	NA	NA	
	012	127.2	-54	1/15/2009	14:32	1.04E+02	9.33E+01	9.89E+01	2.64E-01	6.96E-01	7.95E-01	1.55E+00	5.58E+00	6.40E-00	-5.95E-01	5.03E+00	6.66E+00	NA	NA	NA	
	013	127.2	-54	2/4/2010	11:12	8.56E+01	1.62E+02	1.32E+02	4.26E-01	6.79E-01	7.49E-01	-4.37E+00	6.12E+00	5.32E-00	1.98E-00	4.21E+00	5.14E+00	NA	NA	NA	
	014	127.2	-54	4/15/2010	13:13	1.26E+02	1.34E+02	1.47E+02	-5.12E-03	3.50E-01	4.51E-01	-2.40E+00	2.09E+00	2.96E-00	2.32E-00	2.72E+00	1.18E+01	NA	NA	NA	
	015	127.2	-54	8/26/2010	11:16	1.36E+02	1.40E+02	1.47E+02	2.23E-02	2.70E-01	3.57E-01	-5.02E+00	7.55E+00	8.20E-00	6.43E-01	5.43E+00	7.48E+00	NA	NA	NA	
	016	127.2	-54	1/29/2010	12:26	1.22E+02	1.38E+02	1.45E+02	7.34E-01	9.22E-01	9.73E-01	-1.53E-01	4.82E+00	5.43E-00	1.12E-00	4.33E+00	5.06E+00	NA	NA	NA	
MW-40-162	001	161.7	-88.5	6/5/2007	14:45	1.40E+02	1.56E+02	1.54E+02	2.94E-01	4.53E-01	5.34E-01	-1.67E+00	5.35E+00	4.90E-00	5.65E-01	4.63E+00	4.53E+00	NA	NA	NA	MW-40-162
	002	161.7	-88.5	7/23/2007	17:40	2.59E+01	1.46E+02	1.73E+02	1.19E-01	4.45E-01	5.07E-01	-2.51E-01	2.61E+00	1.75E-00	7.27E-01	1.43E+00	1.69E+00	NA	NA	NA	
	003	161.7	-88.5	10/12/2007	12:54	4.45E+01	1.49E+02	1.59E+02	-5.48E-02	6.20E-01	8.19E-01	-1.11E+00	4.47E+00	4.05E-00	-1.01E+00	3.31E+00	3.47E+00	NA	NA	NA	
	004	161.7	-88.5	1/7/2008	13:10	4.96E+01	1.56E+02	1.82E+02	7.93E-02	3.53E-01	4.48E-01	4.17E-01	2.52E+00	2.87E-00	3.63E-01	2.43E+00	2.72E+00	NA	NA	NA	
	005	161.7	-88.5	8/11/2008	11:44	2.30E+02	1.08E+02	1.75E+02	7.70E-02	4.19E-01	7.31E-01	6.25E-01	2.43E+00	4.16E-00	3.15E-00	2.07E+00	4.11E+00	-5.27E+00	1.22E+01	2.16E+01	
	006	161.7	-88.5	10/28/2008	13:15	1.12E+02	1.77E+02	1.96E+02	2.80E-01	6.35E-01	7.35E-01	-2.00E+00	5.84E+00	6.26E-00	2.11E-00	5.03E+00	7.29E+00	3.75E+00	1.79E+01	2.04E+01	
	007	161.7	-88.5	1/19/2009	11:47	1.07E+02	1.34E+02	1.48E+02	1.32E-01	5.16E-01	6.16E-01	-3.90E-01	3.32E+00	3.67E-00	4.22E-01	2.93E+00	3.47E+00	-9.17E+00	1.85E+01	2.20E+01	
	008	161.7	-88.5	4/13/2009	12:25	1.42E+02	1.37E+02	1.38E+02	3.28E-01	4.24E-01	5.16E-01	2.93E+00	5.64E+00	3.89E-00	6.75E-01	3.81E+00	1.06E+00	2.90E+00	1.85E+01	2.17E+01	
	009	161.7	-88.5	7/20/2009	12:57	1.24E+02	1.92E+02	2.14E+02	7.42E-02	4.26E-01	5.17E-01	-2.20E-01	5.75E+00	6.31E-00	1.54E-00	5.64E+00	6.56E+00	NA	NA	NA	
	010	161.7	-88.5	1/15/2009	15:15	2.87E+01	8.52E+01	9.80E+01	-4.58E-01	6.48E-01	8.27E-01	9.75E-01	5.70E+00	6.47E-00	3.59E-00	5.43E+00	6.97E+00	NA	NA	NA	
	011	161.7	-88.5	2/4/2010	11:57	2.20E+01	1.59E+02	1.82E+02	8.94E-02	5.94E-01	7.38E-01	4.51E-01	4.82E+00	5.46E-00	9.50E-01	4.44E+00	5.12E+00	NA	NA	NA	
	012	161.7	-88.5	4/15/2010	14:50	1.03E+02	1.32E+02	1.46E+02	9.77E-02	6.53E-01	8.18E-01	-2.73E+00	8.36E+00	8.61E-00	2.35E-00	8.63E+00	1.05E+01	NA	NA	NA	
	013	161.7	-88.5	8/26/2010	12:29	1.02E+02	1.36E+02	1.48E+02	5.09E-01	7.23E-01	7.75E-01	7.14E-01	6.23E+00	7.08E-00	3.52E-00	5.73E+00	8.38E+00	NA	NA	NA	
	014	161.7	-88.5	1/29/2010	12:45	6.40E+01	1.27E+02	1.45E+02	-5.51E-03	6.55E-01	7.34E-01	3.60E-01	4.34E+00	4.91E-00	3.43E-01	4.47E+00	5.03E+00	NA	NA	NA	
MW-41-40	002	34.4	20.5	4/12/2006	15:00	7.26E+02	2.07E+02	1.56E+02	2.53E+00	1.74E+00	1.58E+00	2.91E+00	2.42E+00	3.03E-00	-7.58E-01	2.55E+00	2.74E+00	NA	NA	NA	MW-41-40
	003	34.4	20.5	5/25/2006	10:00	6.07E+02	2.22E+02	1.88E+02	5.18E+00	1.46E+00	1.07E+00	4.35E+00	1.06E+01	1.24E-01	-1.16E+00	1.07E+01	1.14E+01	NA	NA	NA	
	004	34.4	20.5	6/12/2006	9:50	6.76E+02	2.00E+02	1.51E+02	3.38E+01	6.83E-01	5.31E-01	5.50E+00	1.02E+01	1.19E-01	9.42E-02	9.87E+00	1.02E+01	NA	NA	NA	
	005	34.4	20.5	7/14/2006	8:45	9.83E+02	2.64E+02	2.37E+02	7.32E+00	2.93E+00	2.09E+00	3.64E+00	1.29E+01	1.63E-01	-2.31E+00	1.07E+01	1.29E+01	NA	NA	NA	
	006	34.4	20.5	8/16/2006	13:15	1.47E+02	1.95E+02	1.58E+02	NA	NA	NA	7.39E-01	6.94E+00	8.78E-00	1.70E-01	5.45E+00	7.51E+00	NA	NA	NA	
	007	34.4	20.5	11/15/2006	12:55	4.25E+02	1.38E+02	1.30E+02	4.54E+00	8.70E-01	6.90E-01	5.00E-01	5.70E+00	6.90E-00	1.30E-00	5.93E+00	8.20E+00	3.10E+00	5.70E+00	6.40E+00	
	008	34.4	20.5	6/19/2007	14:45	3.91E+03	7.32E+02	3.50E+02	5.99E+00	1.15E+00	7.49E-01	-3.09E+00	4.42E+00	3.28E-00	-3.47E-01	2.81E+00	3.01E+00	2.21E-01	1.27E+01	1.49E+01	
	009	34.4	20.5	8/14/2007	14:35	3.80E+02	1.91E+02	2.20E+02	5.36E+00	1.17E+00	7.45E-01	0.00E+00	5.22E+00	5.51E-00	1.43E-00	4.08E+00	4.00E+00	NA	NA	NA	
	010	34.4	20.5	1/24/2008	16:28	2.15E+02	1.80E+02	1.93E+02	3.35E+00	1.07E+00	7.54E-01	2.67E+00	2.55E+00	2.21E-00	-5.18E-01	2.02E+00	2.16E+00	NA	NA	NA	

See Page 32 for Notes

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	
MW-41-40	011	34.4	20.5	10/22/2008	14:49	2.21E+03	7.26E+02	5.92E+02	5.91E+00	1.10E+00	4.21E-01	3.07E+00	6.33E+00	7.66E-00	-3.60E+00	8.64E+00	8.40E+00	NA	NA	NA	MW-41-40
	012	34.4	20.5	4/7/2009	15:56	5.71E+02	1.91E+02	1.50E+02	5.38E+00	1.14E+00	6.38E-01	4.26E+00	7.29E+00	4.86E-00	4.60E-01	3.27E+00	3.76E+00	NA	NA	NA	
	013	34.4	20.5	7/24/2009	15:33	6.17E+02	2.51E+02	2.25E+02	4.30E+00	1.05E+00	7.34E-01	-1.73E-01	3.21E+00	3.51E-00	4.32E-01	3.57E+00	3.93E+00	NA	NA	NA	
	014	34.4	20.5	11/10/2009	13:08	3.15E+02	1.11E+02	9.85E+01	4.30E+00	1.10E+00	8.36E-01	1.79E+00	4.50E+00	5.18E-00	-2.03E+00	4.62E+00	4.72E+00	NA	NA	NA	
	015	34.4	20.5	3/1/2010	17:28	9.35E+02	1.91E+02	1.58E+02	4.31E+00	8.98E-01	4.46E-01	-3.97E+00	8.45E+00	8.76E-00	1.01E-00	5.81E+00	6.59E+00	NA	NA	NA	
	016	34.4	20.5	4/19/2010	14:09	4.37E+02	1.79E+02	1.50E+02	2.39E+00	1.05E+00	8.40E-01	-2.56E+00	8.09E+00	8.29E-00	-6.83E-01	8.55E+00	9.37E+00	NA	NA	NA	
	017	34.4	20.5	7/21/2010	13:41	2.79E+03	3.02E+02	1.47E+02	4.37E+00	1.02E+00	6.33E-01	1.59E+00	5.62E+00	7.07E-00	6.50E-01	7.13E+00	7.61E+00	NA	NA	NA	
	018	34.4	20.5	10/25/2010	16:06	2.43E+03	2.70E+02	1.17E+02	4.30E+00	1.16E+00	6.72E-01	3.32E+00	5.63E+00	6.07E-00	-1.59E+00	6.74E+00	6.96E+00	NA	NA	NA	
MW-41-63	001	59.5	-4.6	4/12/2006	14:45	7.01E+02	2.03E+02	1.53E+02	5.49E+00	2.21E+00	1.40E+00	6.98E-01	2.27E+00	2.22E-00	-3.89E-02	2.63E+00	2.78E+00	NA	NA	NA	MW-41-63
	002	59.5	-4.6	5/23/2006	10:20	3.61E+02	2.07E+02	1.92E+02	5.22E+00	1.35E+00	1.10E+00	7.91E-02	9.63E+00	1.15E-01	3.51E-00	7.87E+00	1.07E+01	NA	NA	NA	
	003	59.5	-4.6	6/12/2006	10:05	2.68E+02	1.67E+02	1.52E+02	8.45E-01	5.28E-01	5.36E-01	8.20E-01	8.70E+00	9.55E-00	2.12E-00	7.05E+00	8.29E+00	NA	NA	NA	
	004	59.5	-4.6	7/18/2006	13:04	2.43E+02	1.95E+02	1.92E+02	2.17E+00	9.90E-01	8.34E-01	3.04E+00	9.49E+00	1.11E-01	1.73E-01	8.03E+00	8.75E+00	NA	NA	NA	
	005	59.5	-4.6	8/16/2006	13:00	3.56E+02	1.09E+02	1.70E+02	NA	NA	NA	3.69E+00	8.12E+00	1.03E-01	-1.55E+00	7.53E+00	7.11E+00	NA	NA	NA	
	006	59.5	-4.6	11/13/2006	13:10	1.57E+02	1.35E+02	1.30E+02	2.26E+00	6.50E-01	6.50E-01	-1.60E+00	4.50E+00	5.70E-00	0.00E-00	5.43E+00	6.60E+00	3.00E+00	6.60E+00	7.30E+00	
	007	59.5	-4.6	6/20/2007	11:05	5.52E+02	1.97E+02	1.86E+02	7.38E+00	1.28E+00	6.27E-01	-3.10E-01	2.37E+00	2.65E-00	-1.06E-02	2.33E+00	2.65E+00	-4.39E-01	1.26E+01	1.48E+01	
	008	59.5	-4.6	8/14/2007	16:10	5.47E+02	2.04E+02	1.99E+02	3.45E+01	9.92E-01	5.41E-01	-2.38E+00	3.40E+00	3.70E-00	1.32E-01	3.43E+00	3.87E+00	NA	NA	NA	
	009	59.5	-4.6	1/25/2008	10:05	3.03E+02	2.79E+02	2.23E+02	3.76E+00	1.13E+00	8.22E-01	0.00E+00	3.33E+00	1.89E-00	5.24E-02	1.64E+00	1.89E+00	NA	NA	NA	
	010	59.5	-4.6	10/22/2008	12:34	6.91E+02	5.73E+02	5.22E+02	5.59E+00	1.13E+00	4.11E-01	2.60E+00	5.59E+00	6.71E-00	9.04E-01	6.03E+00	7.02E+00	NA	NA	NA	
	011	59.5	-4.6	4/23/2009	11:57	2.26E+02	1.82E+02	1.83E+02	4.38E+00	8.84E-01	3.37E-01	4.19E-01	6.60E+00	4.38E-00	1.22E-00	4.15E+00	4.93E+00	NA	NA	NA	
	012	59.5	-4.6	7/24/2009	14:13	4.40E+02	2.34E+02	2.26E+02	2.57E+00	8.22E-01	4.33E-01	-8.28E-01	3.60E+00	3.85E-00	-5.58E-01	3.12E+00	3.31E+00	NA	NA	NA	
	013	59.5	-4.6	11/10/2009	13:30	4.50E+02	1.21E+02	9.90E+01	5.38E+00	9.38E-01	5.02E-01	1.07E+00	5.63E+00	4.24E-00	-4.65E-01	4.83E+00	4.80E+00	NA	NA	NA	
	014	59.5	-4.6	3/1/2010	16:00	2.48E+02	1.59E+02	1.58E+02	2.31E+00	6.78E-01	4.19E-01	3.00E+00	4.64E+00	5.86E-00	-1.07E+00	5.37E+00	5.79E+00	NA	NA	NA	
	015	59.5	-4.6	4/19/2010	14:03	4.36E+02	1.77E+02	1.49E+02	3.56E+00	1.22E+00	7.70E-01	-4.51E+00	1.22E+01	1.52E-01	-7.27E-02	5.92E+00	7.76E+00	NA	NA	NA	
	016	59.5	-4.6	7/21/2010	13:41	5.18E+02	1.68E+02	1.43E+02	4.79E+00	1.09E+00	6.23E-01	-2.71E+00	8.29E+00	8.77E-00	1.61E-00	7.93E+00	9.59E+00	NA	NA	NA	
	017	59.5	-4.6	10/25/2010	12:59	5.06E+02	1.50E+02	1.14E+02	4.25E+00	1.19E+00	7.17E-01	1.06E+00	6.08E+00	7.07E-00	2.87E-00	5.85E+00	7.23E+00	NA	NA	NA	
MW-42-49	001	42.6	27.1	3/23/2006	11:15	2.63E+03	6.60E+02	5.89E+02	5.19E+01	1.72E+00	4.38E-01	1.02E+05	7.14E+02	1.00E-02	1.94E-02	2.73E+01	2.32E+01	NA	NA	NA	MW-42-49
	002	42.6	27.1	3/31/2006	9:29	2.49E+03	4.49E+02	2.37E+02	2.10E+01	9.26E-01	3.67E-01	6.55E+03	1.54E+02	2.76E-01	2.23E-01	2.13E+01	2.50E+01	NA	NA	NA	
	003	42.6	27.1	7/7/2006	17:52	2.51E+03	7.08E+02	7.37E+02	1.29E+02	2.16E+00	4.29E-01	8.11E+04	7.08E+02	1.01E-02	8.81E-01	2.52E+01	1.97E+01	2.22E+03	1.76E+02	5.84E+01	
	004	42.6	27.1	6/18/2007	15:00	1.34E+03	5.00E+02	3.74E+02	7.73E+01	4.04E+00	6.37E-01	1.90E+04	1.65E+03	1.31E-01	4.22E-00	3.71E+00	4.82E+00	1.05E+03	4.53E+01	1.44E+01	
	007	42.6	27.1	10/4/2007	12:40	2.46E+03	2.87E+02	1.93E+02	4.55E+01	3.12E+00	6.02E-01	3.69E+04	3.14E+03	1.83E-01	1.59E-01	5.23E+00	3.61E+00	1.17E+03	4.94E+01	1.88E+01	
	008	42.6	27.1	1/21/2008	16:11	1.52E+03	2.25E+02	4.15E+02	3.54E+01	3.18E+00	9.11E-01	3.38E+04	2.35E+03	2.02E-01	0.00E-00	4.15E+00	5.42E+00	5.01E+02	5.01E+01	2.68E+01	
	010	42.6	27.1	5/13/2008	13:20	3.24E+03	2.56E+02	1.44E+02	2.36E+01	1.54E+00	5.48E-01	1.41E+04	7.59E+02	1.47E-01	1.69E-01	4.47E+00	4.67E+00	7.34E+02	2.85E+01	2.19E+01	
	011	42.6	27.1	8/4/2008	14:24	3.16E+03	2.65E+02	1.91E+02	3.56E+01	1.72E+00	5.59E-01	1.06E+04	6.13E+02	1.20E-01	-8.47E-03	2.69E+00	4.52E+00	3.13E+02	2.60E+01	2.61E+01	
	012	42.6	27.1	9/5/2008	12:52	1.32E+04	8.36E+02	5.38E+02	2.36E+03	4.90E+00	4.02E-01	2.21E+04	1.38E+03	1.58E-01	NA	NA	NA	4.62E+02	2.17E+01	2.03E+01	
	013	42.6	27.1	10/31/2008	13:27	2.60E+03	3.77E+02	1.53E+02	9.51E+01	4.34E+00	4.16E-01	1.78E+04	1.58E+03	1.83E-01	5.88E-01	5.95E+00	7.78E+00	2.71E+02	2.73E+01	1.99E+01	
	014	42.6	27.1	11/17/2008	14:56	1.12E+03	2.01E+02	1.73E+02	1.22E+03	6.96E+00	1.28E+00	1.54E+04	1.16E+03	1.74E-01	3.25E-00	5.21E+00	6.76E+00	2.44E+02	3.00E+01	2.25E+01	
	015	42.6	27.1	1/26/2009	16:16	1.28E+03	3.03E+02	2.26E+02	6.77E+02	1.13E+01	7.44E-01	8.65E+04	8.61E+03	2.66E-01	0.00E-00	5.24E+00	5.56E+00	9.12E+02	4.50E+01	1.90E+01	
	016	42.6	27.1	3/16/2009	14:50	7.22E+04	1.03E+03	1.50E+02	5.38E+02	8.37E+00	7.34E-01	1.40E+05	3.00E+01	2.00E-01	5.23E-00	3.54E+00	2.17E+00	1.16E+03	4.95E+01	2.06E+01	
	017	42.6	27.1	4/17/2009	11:03	2.22E+03	3.29E+02	1.39E+02	2.50E+02	6.63E+00	5.59E-01	8.63E+04	4.66E+01	3.24E-01	2.63E-00	4.67E+00	5.75E+00	9.16E+02	4.11E+01	2.15E+01	
	018	42.6	27.1	9/10/2009	12:00	1.47E+03	2.25E+02	1.79E+02	4.33E+00	1.06E+00	5.30E-01	5.42E+03	4.31E+02	9.57E-00	-1.12E+00	4.04E+00	4.60E+00	7.46E+01	2.37E+01	2.35E+01	
	019	42.6	27.1	10/27/2009	15:34	1.75E+03	2.21E+02	1.57E+02	1.91E+01	2.00E+00	7.46E-01	2.44E+04	1.83E+03	1.64E-01	-1.66E-01	4.72E+00	5.17E+00	1.84E+02	3.04E+01	2.44E+01	
	020	42.6	27.1	2/16/2010	16:49	9.79E+02	1.76E+02	1.53E+02	1.24E+02	5.92E+00	7.35E-01	6.12E+04	7.07E+03	5.55E-01	-9.83E-01	5.81E+00	6.79E+00	7.10E+02	4.05E+01	2.18E+01	
	021	42.6	27.1	4/16/2010	12:59	1.30E+03	4.25E+02	3.71E+02	2.40E+01	2.31E+00	8.23E-01	2.27E+04	2.65E+03	2.92E-01	8.37E-01	1.05E+01	1.23E+01	2.36E+02	2.88E+01	2.07E+01	
	022	42.6	27.1	7/30/2010	11:38	1.69E+03	2.34E+02	1.24E+02	1.39E+01	1.53E+00	3.90E-01	1.87E+04	2.46E+03	2.50E-01	7.33E-01	5.64E+00	7.77E+00	1.77E+02	2.97E+01	2.18E+01	
	023	42.6	27.1	10/27/2010	12:23	1.28E+03	2.03E+02	1.54E+02	1.31E+01	2.31E+00	8.72E-01	2.19E+04	2.54E+03	2.93E-01	-1.67E+00	9.77E+00	1.03E+01	2.24E+02	2.66E+01	2.10E+01	
MW-42-78	001	74	-4.3	3/24/2006	9:45	1.28E+03	5.07E+02	5.75E+02	3.09E-01	3.90E-01	4.38E-01	4.46E+03	1.36E+02	2.22E-01	1.08E-01	1.71E+01	2.08E+01	NA	NA	NA	MW-42-78
	002	74	-4.3	4/7/2006	17:58	7.92E+02	7.04E+02	7.30E+02	1.03E-01	3.68E-01	3.86E-01	1.98E+03	1.19E+02	3.13E-01	-2.34E+00	2.35E+01	2.51E+01	3.66E+01	1.39E+01	1.43E+01	
	003	74	-4.3	6/18/2007	14:40	3.78E+02	1.88E+02	1.88E+02	3.83E-01	5.34E-01	5.70E-01	6.28E+01	1.21E+01	4.11E-00	2.31E-00	3.43E+00	4.00E+00	2.48E+00	1.37E+01	1.52E+01	
	006	74	-4.3	10/4/2007	13:25	4.34E+02	1.94E+02	1.94E+02	2.33E-01	3.09E-01	3.13E-01	3.64E+02	3.44E+01	4.71E-00	3.10E-00	4.01E+00	5.18E+00	5.86E-01	1.53E+01	1.77E+01	
	007	74	-4.3	1/21/2008	15:33	3.46E+02	1.09E+02	1.96E+02	-2.51E-01	6.31E-01	9.32E-01	1.60E+02	1.12E+01	3.35E-00	1.71E-01	3.33E+00	3.61E+00	9.75E+00	2.42E+01	2.75E+01	
	009	74	-4.3	8/4/2008	12:07	6.18E+02	1.50E+02	1.91E+02	3.91E-01	2.27E-01	3.76E-01	2.71E+00	2.42E+00	3.73E-00	-6.44E-01	2.13E+00	3.29E+00	-7.37E-01	1.52E+01	2.68E+01	
	010	74	-4.3	10/31/2008	15:54	5.62E+02	2.12E+02	1.55E+02	4.17E-02	3.31E-01	3.51E-01	3.51E-01	5.68E+00	6.54E-00	8.52E-01	5.72E+00	6.68E+00	3.69E+00	1.71E+01	2.02E+01	
	011	74	-4.3	1/30/2009	11:22	3.65E+02	2.18E+02	2.00E+02	4.40E-01	6.45E-01	7.33E-01	6.70E-01	3.32E+00	3.88E-00	-1.89E-01	3.57E+00	3.99E+00	NA	NA	NA	
	012	74	-4.3	4/17/2009	10:49	2.74E+02	1.88E+02	1.89E+02	4.67E-01	6.74E-01	7.47E-01	1.61E+00	5.65E+00	3.90E-00	5.31E-01	3.63E+00	4.14E+00	6.58E+00	1.91E+01	2.16E+01	
	013	74	-4.3	8/10/2009	12:40	5.19E+02	1.82E+02	1.78E+02	5.90E-01	6.39E-01	6.73E-01	6.07E-01	3.40E+00	3.94E-00	8.71E-01	3.31E+00	3.94E+00	-7.92E+00	1.96E+01	2.32E+01	
	014	74	-4.3	10/27/2009	14:06	5.51E+02	1.73E+02	1.56E+02	9.06E-02	5.20E-01	6.23E-01	1.19E+00	3.54E+00	4.06E-00	-1.12E+00	3.62E+00	3.74E+00	-8.49E-01	1.94E+01	2.25E+01	
	015	74	-4.3	2/16/2010	16:19	3.57E+02	1.49E+02	1.52E+02	-1.14E-01	4.87E-01	6.30E-01	3.92E+00	5.46E+00	6.70E-00	-1.84E-01	4.93E+00	5.52E+00	-9.55E+00	1.76E+01	2.08E+01	
	016	74	-4.3	4/16/2010	13:29	3.93E+02	2.91E+02	3.10E+02	1.81E-01	7.86E-01	9.73E-01	2.22E+00	8.67E+00	1.03E-01	-6.67E+00	9.24E+00	7.54E+00	-5.55E+00	1.76E+01	2.08E+01	
	017	74	-4.3	7/30/2010	12:23	6.31E+02	1.71E+02	1.31E+02	2.78E-02	3.33E-01	3.35E-01	-1.17E-01	7.56E+00	9.30E-00	-7.43E-01	7.04E+00	7.42E+00	1.96E+00	1.31E+01	1.52E+01	
	018	74	-4.3	10/27/2010	13:56	6.13E+02	1.74E+02	1.54E+02	1.14E-01	4.72E-01	5.37E-01	1.09E+00	8.69E+00	9.51E-00	5.11E+00	8.41E+00	7.24E+00	1.24E+00	1.80E+01	2.09E+01	
MW-43-28	002	23.5	25.3	4/12/2006	12:45	3.46E+02	1.79E+02	1.59E+02	9.40E-02	7.40E-01	8.30E-01	-1.44E+00	2.22E+00	2.24E-00	1.35E-00	2.24E+00	2.56E+00	NA	NA	NA	MW-43-28
	003	23.5	25.3	5/23/2006	12:10	1.20E+02	1.83E+02	1.89E+02	2.53E+00	1.39E+00	1.72E+00	-8.54E-01	9.47E+00	1.03E-01	-1.53E-01	9.42E+00	1.06E+01	NA	NA	NA	
	004	23.5	25.3	6/12/2006	12:45	2.30E+02	1.62E+02	1.52E+02	1.39E-01	4.71E-01	5.71E-01	2.85E+00	6.55E+00	7.82E-00	-7.55E-01	5.95E+00	6.39E+00	NA	NA	NA	
	005	23.5	25.3	7/12/2006	9:40	1.09E+02	1.88E+02	1.95E+02	1.10E+00	1.69E+00	1.72E+00	2.41E+00	9.67E+00	1.11E-01	-7.95E-01	8.53E+00	9.11E+00	NA	NA	NA	

See Page 32 for Notes

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	
MW-43-28	006	23 5	25 3	8/16/2006	12 10	2 60E+02	1 83E+02	1 72E+02	NA	NA	NA	5 47E-01	8 43E-01	9 56E-01	-5 16E-01	7 70E-01	8 33E-01	NA	NA	NA	MW-43-28
	007	23 5	25 3	6/18/2007	13 30	2 78E+02	1 70E+02	1 74E+02	1 37E+00	5 97E-01	4 36E-01	-3 58E-01	3 13E+00	3 39E-00	-3 72E-01	3 31E+00	3 46E+00	3 58E+00	1 50E+01	1 73E+01	
	008	23 5	25 3	8/13/2007	11 35	9 56E+01	1 71E+02	1 93E+02	-6 25 3-01	7 50E-01	1 02E+00	-7 36E-01	3 57E+00	3 68E-00	2 77E-01	2 73E+00	3 12E+00	NA	NA	NA	
	009	23 5	25 3	1/25/2008	11 11	3 06E+02	2 82E+02	2 96E+02	1 46E-01	6 06E-01	7 88E-01	1 88E+00	2 16E+00	2 66E-00	1 45E-00	2 51E+00	3 03E+00	8 44E+00	1 76E+01	1 99E+01	
	010	23 5	25 3	10/31/2008	14 17	2 65E+02	1 58E+02	1 56E+02	-1 08 3-01	3 95E-01	5 56E-01	4 07E+00	5 19E+00	6 44E-00	-1 16E+00	5 21E+00	6 63E+00	NA	NA	NA	
	011	23 5	25 3	4/7/2009	17 14	3 14E+02	1 65E+02	1 51E+02	-1 47 3-01	5 56E-01	7 35E-01	5 41E-01	5 93E+00	3 95E-00	-1 31E-01	3 45E+00	3 77E+00	NA	NA	NA	
	012	23 5	25 3	7/31/2009	13 10	1 30E+02	1 44E+02	1 56E+02	2 45 3 02	4 13E 01	5 16E 01	1 19E+00	6 04E+00	7 03E-00	1 16E+00	5 23E+00	6 64E+00	NA	NA	NA	
	013	23 5	25 3	1/ /10/2009	14 10	1 73E102	9 72E101	9 64E101	1 57E-02	5 19E-01	6 53E-01	-5 72E-02	3 66E100	4 25E 00	2 17E 00	4 13E100	4 96E100	NA	NA	NA	
	014	23 5	25 3	3/2/2010	17 30	2 13E+02	1 56E+02	1 58E+02	1 48E-01	3 81E-01	4 30E-01	-9 17E-01	5 10E+00	5 00E-00	2 29E-00	5 83E+00	6 91E+00	NA	NA	NA	
	015	23 5	25 3	4/19/2010	15 58	2 25E+02	1 59E+02	1 47E+02	-7 48 3-02	3 52E-01	7 33E-01	-2 56E-01	5 61E+00	6 36E-00	-1 90E-01	5 61E+00	6 53E+00	NA	NA	NA	
	016	23 5	25 3	7/20/2010	13 48	9 11E+01	1 33E+02	1 47E+02	-6 43 3-02	3 80E-01	5 33E-01	5 80E+00	7 53E+00	9 76E-00	-1 44E+00	9 49E+00	1 01E+01	NA	NA	NA	
	017	23 5	25 3	10/25/2010	11 29	1 95E+02	1 17E+02	1 13E+02	-1 98 3-01	5 31E-01	6 34E-01	3 56E+00	5 00E+00	6 09E-00	-5 01E-01	5 43E+00	5 84E+00	NA	NA	NA	
MW-43-62	002	51	-2 2	4/12/2006	11 55	2 00E+02	1 65E+02	1 58E+02	4 34E-01	4 53E-01	4 33E-01	3 27E+00	4 04E+00	3 73E-00	1 02E+00	3 09E+00	3 47E+00	NA	NA	NA	MW-43-62
	003	51	-2 2	5/25/2006	12 30	1 24E+02	1 77E+02	1 82E+02	3 23E-01	1 64E+00	1 77E+00	-1 21E+00	1 26E+01	1 36E-01	-2 10E+00	9 81E+00	1 02E+01	NA	NA	NA	
	004	51	-2 2	6/12/2006	12 40	1 29E+02	1 40E+02	1 38E+02	1 25E+00	5 58E-01	5 36E-01	4 97E+00	7 02E+00	7 98E-00	-6 81E-01	7 15E+00	7 85E+00	NA	NA	NA	
	005	51	-2 2	7/12/2006	10 05	2 04E+01	1 43E+02	1 55E+02	4 76E-01	1 46E+00	1 54E+00	1 54E+01	1 10E+01	1 36E-01	3 73E-01	1 01E+01	1 17E+01	NA	NA	NA	
	006	51	-2 2	8/16/2006	11 55	1 08E+02	1 67E+02	1 70E+02	NA	NA	NA	2 23E-01	9 10E-01	1 01E-00	-1 95E-01	8 33E-01	9 13E-01	NA	NA	NA	
	007	51	2 2	6/19/2007	9 36	1 97E+02	1 88E+02	2 02E+02	8 55E 01	6 58E 01	6 10E 01	6 77E 01	3 21E+00	3 42E-00	8 52E 01	3 13E+00	3 26E+00	1 38E+00	1 35E+01	1 55E+01	
	008	51	-2 2	8/13/2007	12 42	1 14E+02	1 73E+02	1 92E+02	1 29E-01	6 90E-01	8 27E-01	-1 18E+00	3 05E+00	3 89E-00	1 53E-01	3 31E+00	3 80E+00	NA	NA	NA	
	009	51	-2 2	1/25/2008	10 57	1 23E+02	1 74E+02	1 93E+02	1 30E+00	6 47E-01	5 52E-01	4 31E-01	2 42E+00	2 39E-00	-1 11E+00	2 07E+00	2 10E+00	3 76E+00	1 67E+01	1 91E+01	
	010	51	-2 2	10/31/2008	13 16	2 25E+02	1 56E+02	1 56E+02	1 97E-01	4 13E-01	4 74E-01	-3 55E-03	6 45E+00	6 96E-00	2 59E-00	5 53E+00	6 60E+00	NA	NA	NA	
	011	51	-2 2	4/7/2009	13 59	1 34E+02	1 43E+02	1 52E+02	6 85E-01	5 88E-01	5 34E-01	1 18E+01	6 15E+00	4 10E-00	-4 55E-01	3 89E+00	4 22E+00	NA	NA	NA	
	012	51	-2 2	7/31/2009	12 52	1 18E+02	1 46E+02	1 59E+02	8 83E-01	4 79E-01	3 54E-01	-8 49E-01	5 09E+00	5 49E-00	-2 26E-01	7 25E+00	6 57E+00	NA	NA	NA	
	013	51	-2 2	1/ /10/2009	12 02	1 96E+02	1 01E+02	9 34E+01	1 24E+00	7 10E-01	6 57E-01	3 69E-01	5 16E+00	5 74E-00	-4 87E-01	5 54E+00	5 94E+00	NA	NA	NA	
	014	51	-2 2	3/2/2010	14 46	1 31E+02	1 52E+02	1 58E+02	3 51E-01	3 93E-01	4 35E-01	1 64E+00	4 61E+00	5 43E-00	1 35E-00	4 75E+00	5 61E+00	NA	NA	NA	
	015	51	-2 2	4/19/2010	13 17	2 16E+02	1 39E+02	1 47E+02	6 35E-01	7 10E-01	7 15E-01	-1 08E+00	4 44E+00	4 90E-00	1 30E-00	4 63E+00	5 52E+00	NA	NA	NA	
	016	51	-2 2	7/20/2010	15 07	5 97E+01	1 33E+02	1 51E+02	4 41E-01	4 75E-01	4 34E-01	-1 11E+00	7 56E+00	8 85E-00	-2 40E+00	8 27E+00	8 59E+00	NA	NA	NA	
	017	51	2 2	10/25/2010	11 06	9 76E+01	1 05E+02	1 12E+02	3 69E 01	7 10E 01	8 33E 01	5 94E 01	6 27E+00	6 81E-00	6 69E 01	5 37E+00	5 81E+00	NA	NA	NA	
MW-44-66	001	62 4	31 1	3/20/2006	14 05	3 38E102	1 91E102	1 73E102	7 30E-02	1 33E100	1 67E100	6 54E-01	1 65E101	1 17E 01	-2 67E10C	1 02E101	1 09E101	NA	NA	NA	MW-44-66
	002	62 4	31 1	5/24/2006	9 05	2 37E+02	1 97E+02	1 92E+02	7 41E-01	4 11E-01	4 45E-01	-3 37E-01	8 57E+00	9 69E-00	4 85E-00	9 05E+00	1 11E+01	NA	NA	NA	
	003	62 4	31 1	7/20/2006	11 15	8 92E+02	2 27E+02	1 53E+02	7 55E-01	1 22E+00	1 31E+00	5 54E+01	1 04E+01	9 59E-00	6 24E-01	7 57E+00	8 48E+00	NA	NA	NA	
	004	62 4	31 1	6/29/2007	15 00	2 68E+02	1 73E+02	1 84E+02	-4 25 3-01	7 28E-01	9 34E-01	2 64E-01	3 63E+00	3 47E-00	7 78E-01	3 42E+00	3 98E+00	NA	NA	NA	
	005	62 4	31 1	8/14/2007	13 10	4 17E+02	1 98E+02	2 00E+02	9 30E-02	4 72E-01	5 75E-01	-8 93E-01	2 51E+00	3 08E-00	-3 39E-01	3 42E+00	3 11E+00	NA	NA	NA	
	006	62 4	31 1	10/31/2007	13 30	5 13E+02	1 82E+02	1 81E+02	3 77E-01	4 10E-01	4 21E-01	2 76E+00	4 29E+00	4 81E-00	1 91E-00	3 92E+00	4 71E+00	NA	NA	NA	
	007	62 4	31 1	1/24/2008	12 55	2 91E+02	2 00E+02	2 12E+02	2 05E-01	4 53E-01	4 99E-01	1 73E+01	4 35E+00	2 31E-00	1 43E-00	3 17E+00	2 43E+00	NA	NA	NA	
	008	62 4	31 1	4/30/2008	15 38	1 61E+02	1 19E+02	1 96E+02	4 11E-02	4 26E-01	7 39E-01	-8 72E-02	2 06E+00	3 38E-00	9 13E-01	2 44E+00	4 27E+00	NA	NA	NA	
	009	62 4	31 1	7/25/2008	12 18	5 50E+02	2 55E+02	3 75E+02	3 07E-01	3 56E-01	6 17E-01	-2 33E+00	2 53E+00	3 03E-00	-2 09E-01	1 74E+00	2 85E+00	NA	NA	NA	
	010	62 4	31 1	10/25/2008	13 17	3 18E+02	1 61E+02	1 56E+02	3 23E-01	3 83E-01	3 92E-01	-3 20E+00	5 21E+00	5 30E-00	-1 59E+00	5 73E+00	6 02E+00	NA	NA	NA	
	011	62 4	31 1	2/3/2009	9 40	2 06E102	1 92E102	1 97E102	4 52E-01	7 30E-01	9 05E-01	1 96E100	3 53E100	4 10E 00	3 02E 00	3 05E100	4 12E100	NA	NA	NA	
	012	62 4	31 1	4/20/2009	13 32	3 10E102	1 90E102	2 06E102	2 20E-01	4 26E-01	5 59E-01	-7 47E-01	6 30E100	4 25E 00	-1 51E-01	4 42E100	4 97E100	NA	NA	NA	
	013	62 4	31 1	7/29/2009	12 56	7 44E+02	2 00E+02	1 88E+02	6 54E-01	7 57E-01	8 38E-01	8 84E-02	6 04E+00	6 70E-00	1 83E-00	5 53E+00	6 69E+00	NA	NA	NA	
	014	62 4	31 1	11/5/2009	16 27	7 12E+02	1 87E+02	9 71E+01	3 23E-01	6 30E-01	6 79E-01	-4 93E+00	8 65E+00	7 60E-00	8 01E-01	4 88E+00	5 53E+00	NA	NA	NA	
	015	62 4	31 1	2/23/2010	16 08	4 37E+02	1 70E+02	1 70E+02	4 04E-02	3 30E-01	3 79E-01	2 33E+00	4 22E+00	5 12E-00	-7 78E-01	4 42E+00	4 87E+00	NA	NA	NA	
	016	62 4	31 1	6/10/2010	15 30	4 75E+02	1 89E+02	1 92E+02	2 16E-01	6 77E-01	7 93E-01	-1 54E+00	5 51E+00	6 37E-00	-1 51E+00	5 05E+00	6 25E+00	NA	NA	NA	
	017	62 4	31 1	7/22/2010	15 47	1 75E+02	1 41E+02	1 47E+02	2 76E-01	5 53E-01	6 43E-01	-3 76E+00	6 66E+00	6 84E-00	1 23E-00	8 52E+00	9 73E+00	NA	NA	NA	
	018	62 4	31 1	10/26/2010	14 46	3 10E+02	1 29E+02	1 11E+02	-1 07 3-01	4 30E-01	5 95E-01	4 23E-01	6 24E+00	7 11E-00	-3 70E+00	7 37E+00	7 27E+00	NA	NA	NA	
MW-44-102	001	30	13 5	6/13/2006	10 35	2 53E+02	2 01E+02	1 96E+02	3 53E-01	9 93E-01	1 26E+00	-3 22E+00	8 26E+00	8 67E-00	-7 71E-01	7 99E+00	8 52E+00	NA	NA	NA	MW-44-102
	002	30	13 5	7/20/2006	10 50	3 16E+02	1 87E+02	1 54E+02	-3 39 3-01	1 05E+00	1 79E+00	-2 99E+00	9 99E+00	9 83E-00	-2 54E+00	9 59E+00	9 39E+00	NA	NA	NA	
	003	30	13 5	8/4/2006	9 40	7 61E+02	2 30E+02	1 81E+02	NA	NA	NA	4 04E+00	8 10E+00	7 76E-00	2 60E+00	7 01E+00	6 82E+00	NA	NA	NA	
	004	30	13 5	9/13/2006	11 30	2 67E102	1 94E102	2 00E102	NA	NA	NA	7 19E100	9 60E100	1 12E 01	-4 76E-01	9 13E100	8 99E100	NA	NA	NA	
	005	30	13 5	6/19/2007	17 46	2 98E+02	1 76E+02	1 83E+02	-1 33 3-01	4 81E-01	6 39E-01	1 88E+00	2 15E+00	2 63E-00	6 41E-01	2 02E+00	2 38E+00	-4 92E+00	1 31E+01	1 38E+01	
	006	30	13 5	8/14/2007	14 55	2 84E+02	1 89E+02	1 99E+02	1 97E-01	7 55E-01	8 99E-01	-1 46E+00	2 76E+00	2 77E-00	-1 52E+00	2 77E+00	2 73E+00	NA	NA	NA	
	007	30	13 5	10/31/2007	12 01	3 54E+02	1 76E+02	1 82E+02	-2 58 3-01	7 75E-01	9 50E-01	-6 50E-01	2 88E+00	3 11E-00	-1 23E+00	3 63E+00	3 11E+00	NA	NA	NA	
	008	30	13 5	1/24/2008	13 05	4 17E+02	2 94E+02	2 96E+02	2 06E-01	5 16E-01	6 34E-01	1 18E+01	4 64E+00	3 19E-00	-4 44E-03	2 85E+00	3 11E+00	NA	NA	NA	
	009	30	13 5	4/30/2008	15 28	2 56E+02	1 22E+02	1 96E+02	7 90E-02	3 71E-01	7 13E-01	1 03E+00	2 03E+00	3 63E-00	-2 67E+00	3 04E+00	4 52E+00	NA	NA	NA	
	010	30	13 5	7/25/2008	12 18	4 37E+02	2 46E+02	3 75E+02	-2 83 3-02	1 83E-01	3 21E-01	-4 07E-01	1 78E+00	2 88E-00	1 35E-00	1 87E+00	3 41E+00	NA	NA	NA	
	011	30	13 5	10/25/2008	13 48	4 75E+02	1 68E+02	1 55E+02	2 01E-01	4 55E-01	5 44E-01	1 72E+00	6 24E+00	7 28E-00	2 39E-00	8 12E+00	8 47E+00	NA	NA	NA	
	012	30	13 5	2/3/2009	12 06	2 57E+02	1 94E+02	1 93E+02	4 66E-01	6 12E-01	6 71E-01	9 83E-01	3 39E+00	4 07E-00	-9 65E-01	3 58E+00	3 74E+00	NA	NA	NA	
	013	30	13 5	4/28/2009	13 34	5 14E+02	1 82E+02	1 80E+02	3 70E-01	7 10E-01	8 33E-01	9 60E-01	9 27E+00	5 51E-00	-2 67E-01	5 13E+00	5 85E+00	NA	NA	NA	
	014	30	13 5	7/29/2009	12 08	4 50E+02	1 86E+02	1 89E+02	4 34E 01	6 29E 01	7 73E 01	4 52E 02	6 13E+00	6 76E-00	3 58E 01	5 05E+00	5 49E+00	NA	NA	NA	
	015	30	13 5	11/5/2009	15 23	5 15E+02	1 25E+02	9 78E+01	7 80E-01	7 47E-01	8 12E-01	1 01E+00	5 22E+00	4 51E-00	-4 18E+00	5 01E+00	5 71E+00	NA	NA	NA	
	016	30	13 5	2/17/2010	16 35	5 12E+02	1 71E+02	1 59E+02	2 24E-01	3 57E-01	3 93E-01	-3 93E+00	6 67E+00	5 43E-00	1 47E-00	3 55E+00	4 34E+00	NA	NA	NA	
	017	30	13 5	6/10/2010	13 13	4 94E+02	1 79E+02	1 83E+02	-1 79 3-01	5 15E-01	6 14E-01	-2 41E+00	7 89E+00	8 11E-00	-5 22E+00	7 57E+00	6 86E+00	NA	NA	NA	
	018	30	13 5	7/21/2010	13 20	2 76E+02	1 49E+02	1 45E+02	4 11E-01	4 70E-01	4 30E-01	2 38E+00	1 02E+01	1 18E-01	-1 63E+00	8 85E+00	9 25E+00	NA	NA	NA	

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	
MW-44-102	019	80	13 5	10/26/2C10	13 32	4 47E+C2	1 42E+C2	1 12E+02	2 42E-0:	5 47E-0:	6 33E-01	-2 73E+00	5 49E+0C	5 54E-0C	6 85E-01	5 33E+00	6 1:E+00	NA	NA	NA	MW-44-102
MW-45-42	001	37	16 6	4/4/2006	17 20	5 18E+C2	2 22E+C2	2 17E+02	8 83E-0:	5 94E-0:	5 95E-01	1 41E+01	1 35E+01	1 54E-01	-4 38E-02	1 22E+01	1 34E+01	NA	NA	NA	MW-45-42
	002	37	16 6	5/25/2006	9 25	1 82E+C3	3 74E+C2	2 45E+02	9 78E-0:	1 14E+00	1 :8E+00	-7 92E+00	1 21E+01	1 17E-01	-3 57E+0C	1 21E+01	1 23E+01	NA	NA	NA	
	003	37	16 6	6/12/2006	10 45	2 27E+C3	4 13E+C2	2 15E+02	1 32E+00	6 80E-0:	7 49E-01	9 06E-02	5 68E+0C	6 29E-0C	2 61E-00	5 63E+00	6 70E+00	NA	NA	NA	
	004	37	16 6	7/14/2006	9 30	4 19E+C2	2 18E+C2	2 20E+02	0 30E+00	1 45E+00	1 59E+00	1 22E+00	8 17E+0C	9 27E-0C	2 33E-00	9 82E+00	1 13E+01	NA	NA	NA	
	005	37	16 6	8/11/2006	10 00	3 16E+C3	5 51E+C2	2 71E+02	Na	Na	Na	-1 16E-0:	1 51E+0C	1 64E-0C	-4 76E-01	1 43E+00	1 54E+00	NA	NA	NA	
	006	37	16 6	9/13/2006	11 50	4 15E+C3	7 32E+C2	3 27E+02	NA	NA	NA	1 58E+00	5 65E+0C	6 00E-0C	1 46E+0C	5 32E+00	5 77E+00	NA	NA	NA	
	007	37	16 6	1:/13/2C06	13 20	5 25E1C2	1 30E1C2	1 40E102	-7 10Z-01	7 50E-0:	8 30E-01	3 70E100	5 40E100	5 60E 00	5 00E-01	5 90E100	6 30E100	3 00E-01	3 60E100	4 10E100	
	008	37	16 6	6/21/2007	15 05	2 32E+C3	6 27E+C2	4 36E+02	-6 08E-02	6 25E-0:	7 76E-01	1 31E-01	4 14E+0C	4 59E-0C	2 51E-00	2 88E+00	4 08E+00	3 56E+00	1 30E+01	1 49E+01	
	009	37	15 6	8/15/2007	11 50	1 16E+C3	1 80E+C2	1 47E+02	-3 79Z-01	7 74E-0:	9 47E-01	1 92E+00	2 76E+0C	3 41E-0C	1 19E-00	2 63E+00	3 23E+00	NA	NA	NA	
	010	37	15 6	10/5/2007	11 05	2 22E+C3	3 05E+C2	1 50E+02	3 55E-0:	5 10E-0:	5 56E-01	0 00E+00	4 13E+0C	1 99E-0C	3 65E-01	1 94E+00	2 2:E+00	NA	NA	NA	
	011	37	15 6	1/25/2008	12 15	1 44E+C3	3 90E+C2	2 96E+02	2 08E-0:	5 15E-0:	6 03E-01	1 60E+00	2 43E+0C	2 88E-0C	5 96E-01	2 31E+00	2 66E+00	NA	NA	NA	
	012	37	15 6	5/1/2008	15 15	1 13E+C3	1 51E+C2	1 96E+02	4 10E-02	3 11E-0:	6 29E-01	6 65E-01	1 59E+0C	3 47E-0C	-1 17E+0C	3 62E+00	4 55E+00	NA	NA	NA	
	013	37	16 6	7/25/2008	16 40	2 32E+C3	3 77E+C2	3 74E+02	3 02E-0:	2 75E-0:	4 42E-01	-1 77E+00	1 76E+0C	2 53E-0C	1 09E-00	1 75E+00	3 19E+00	NA	NA	NA	
	014	37	16 6	10/22/2C08	14 55	3 14E+C3	8 03E+C2	5 91E+02	4 62E-0:	5 15E-0:	5 29E-01	-1 64E+00	5 C7E+0C	5 26E-0C	-3 C0E+0C	4 93E+00	4 36E+00	NA	NA	NA	
	015	37	16 6	2/2/2009	13 02	1 41E+C3	3 27E+C2	1 97E+02	-1 70Z-01	4 41E-0:	6 54E-01	-1 41E+00	2 47E+0C	2 67E-0C	-1 57E+0C	2 55E+00	2 57E+00	NA	NA	NA	
	016	37	16 6	4/23/2009	15 20	5 99E+C3	9 50E+C2	4 38E+02	2 63E-0:	5 33E-0:	6 38E-01	-4 59E-0:	4 41E+0C	2 94E-0C	-1 42E+0C	2 42E+00	2 48E+00	NA	NA	NA	
	017	37	16 6	7/24/2009	14 30	1 90E+C3	3 50E+C2	2 31E+02	5 09E 02	7 57E 0:	9 17E 01	4 63E 01	5 C5E+0C	5 40E-0C	1 23E-00	3 6CE+00	4 48E+00	NA	NA	NA	
	018	37	16 6	1:/10/2C09	14 49	2 50E+C3	2 24E+C2	1 34E+02	6 11E-02	6 16E-0:	7 50E-01	4 83E-01	4 44E+0C	5 17E-0C	-8 72E-01	5 57E+00	5 86E+00	NA	NA	NA	
	019	37	16 6	2/17/2010	15 55	3 86E+C3	2 88E+C2	1 58E+02	6 43E-0:	5 22E-0:	4 78E-01	2 03E+00	4 29E+0C	5 10E-0C	-9 48E-01	4 35E+00	4 74E+00	NA	NA	NA	
	020	37	16 6	4/20/2010	16 13	2 02E+C3	3 05E+C2	1 51E+02	2 96E-0:	6 27E-0:	7 22E-01	2 54E+00	6 09E+0C	7 62E-0C	-7 47E+0C	8 45E+00	9 97E+00	NA	NA	NA	
	021	37	16 6	7/19/2010	15 38	3 69E+C3	3 35E+C2	1 43E+02	5 08E-0:	6 10E-0:	6 47E-01	1 04E+00	7 75E+0C	8 85E-0C	-1 87E+0C	7 1:E+00	7 1:E+00	NA	NA	NA	
	022	37	16 6	10/22/2C10	15 59	2 74E+C3	2 90E+C2	1 13E+02	9 55E-02	5 19E-0:	6 32E-01	1 55E+00	6 C4E+0C	6 99E-0C	-1 65E+0C	5 7:E+00	5 89E+00	NA	NA	NA	
MW-45-61	001	58	-4 4	4/4/2006	17 00	2 98E+C2	2 18E+C2	2 23E+02	1 82E-0:	5 33E-0:	5 39E-01	8 62E+00	1 14E+01	1 32E-01	1 40E-00	1 02E+01	1 17E+01	NA	NA	NA	MW-45-61
	002	58	-4 4	5/25/2006	9 10	1 71E+C3	3 57E+C2	2 37E+02	5 63E-0:	9 81E-0:	1 03E+00	7 76E-01	9 14E+0C	1 02E-01	5 35E-00	1 05E+01	1 3:E+01	NA	NA	NA	
	003	58	-4 4	6/12/2006	11 00	1 02E+C3	2 31E+C2	1 56E+02	4 81E-0:	5 85E-0:	6 90E-01	-4 60E+00	6 63E+0C	7 11E-0C	9 35E-02	5 22E+00	7 59E+00	NA	NA	NA	
	004	58	-4 4	7/20/2006	12 50	3 77E+C2	1 88E+C2	1 56E+02	0 30E+00	1 16E+00	1 59E+00	-3 98E-0:	5 08E+0C	5 30E-0C	1 33E-00	3 9CE+00	5 07E+00	NA	NA	NA	
	005	58	-4 4	8/11/2006	9 15	1 35E+C3	2 88E+C2	1 91E+02	NA	NA	NA	6 43E+00	9 17E+0C	1 16E-01	8 33E 01	9 0CE+00	9 75E+00	NA	NA	NA	
	006	58	-4 4	9/13/2006	9 30	1 45E1C3	3 09E102	2 24E102	NA	NA	NA	-6 65E100	7 21E100	5 92E 00	-3 C6E10C	7 35E100	6 87E100	NA	NA	NA	
	007	58	-4 4	1:/13/2C06	11 20	9 57E+C2	1 44E+C2	1 40E+02	1 73E+00	7 50E-0:	7 50E-01	-3 30E-0:	4 10E+0C	5 30E-0C	-3 20E+0C	4 5:E+00	6 30E+00	2 90E+00	6 60E+00	7 30E+00	
	008	58	-4 4	6/21/2007	12 55	1 47E+C3	5 42E+C2	4 34E+02	-7 02Z-02	7 47E-0:	9 57E-01	5 12E+00	4 42E+0C	5 52E-0C	-7 21E-01	5 5CE+00	5 69E+00	3 5:E+00	7 49E+01	1 71E+01	
	009	58	-4 4	8/15/2007	11 55	1 50E+C3	1 88E+C2	1 41E+02	4 74E-02	7 90E-0:	9 41E-01	3 33E+00	4 25E+0C	4 03E-0C	-6 51E-01	3 8:E+00	3 59E+00	NA	NA	NA	
	010	58	-4 4	10/5/2007	11 30	2 15E+C3	3 03E+C2	1 52E+02	4 87E-0:	5 23E-0:	5 36E-01	-1 73E-0:	1 43E+0C	1 56E-0C	6 59E-02	1 4:E+00	1 62E+00	NA	NA	NA	
	011	58	-4 4	1/25/2008	11 55	2 66E+C3	4 00E+C2	2 96E+02	4 26E-0:	5 76E-0:	6 21E-01	2 42E+00	3 60E+0C	2 52E-0C	-2 05E-01	2 8:E+00	3 19E+00	NA	NA	NA	
	012	58	-4 4	5/1/2008	10 16	2 21E+C3	1 80E+C2	1 95E+02	6 93E-0:	4 96E-0:	7 56E-01	3 :6E-01	2 C7E+0C	3 59E-0C	-1 29E+0C	2 2:E+00	3 53E+00	NA	NA	NA	
	013	58	-4 4	7/25/2008	13 51	1 80E+C3	3 46E+C2	3 76E+02	2 36E-0:	2 45E-0:	4 35E-01	-1 88E+00	1 51E+0C	2 80E-0C	7 83E-01	1 91E+00	3 40E+00	NA	NA	NA	
	014	58	-4 4	10/22/2C08	9 33	1 27E+C3	6 35E+C2	5 90E+02	1 99E-0:	5 82E-0:	6 91E-01	-1 52E+00	5 C7E+0C	5 32E-0C	1 04E-00	5 7:E+00	6 58E+00	NA	NA	NA	
	015	58	-4 4	2/2/2009	13 13	1 36E+C3	3 24E+C2	1 99E+02	-1 47Z-01	7 51E-0:	9 47E-01	9 93E-01	3 59E+0C	4 20E-0C	2 30E-01	3 2:E+00	3 66E+00	NA	NA	NA	
	016	58	-4 4	4/23/2009	10 20	1 46E1C3	5 45E102	4 25E102	-1 37Z-01	6 17E-0:	0 36E-01	-4 72E-0:	4 17E100	2 70E 00	1 13E 00	2 54E100	3 01E100	NA	NA	NA	
	017	58	-4 4	7/24/2009	11 56	1 11E1C3	2 93E102	2 29E102	1 01E-0:	0 34E-0:	9 52E-01	-5 29E-0:	3 33E100	3 69E 00	6 00E-01	3 24E100	3 82E100	NA	NA	NA	
	018	58	-4 4	11/9/2009	12 53	1 37E+C3	1 77E+C2	1 25E+02	3 44E-0:	5 20E-0:	5 74E-01	-4 53E-0:	5 59E+0C	6 70E-0C	-3 73E+0C	7 04E+00	6 99E+00	NA	NA	NA	
	019	58	-4 4	2/17/2010	12 55	1 44E+C3	2 10E+C2	1 58E+02	3 08E-0:	3 80E-0:	3 95E-01	-8 12E-0:	3 56E+0C	4 1/E-0C	-2 61E+0C	4 3/E+00	4 43E+00	NA	NA	NA	
	020	58	-4 4	4/20/2010	11 13	9 89E+C2	2 25E+C2	1 45E+02	2 71E-0:	7 70E-0:	8 39E-01	-8 70E-02	7 51E+0C	8 84E-0C	-3 82E+0C	8 70E+00	8 72E+00	NA	NA	NA	
	021	58	-4 4	7/19/2010	13 28	1 00E+C3	2 07E+C2	1 48E+02	4 07E-0:	5 34E-0:	5 30E-01	-2 93E+00	8 29E+0C	8 61E-0C	-2 24E+0C	8 88E+00	9 24E+00	NA	NA	NA	
	022	58	-4 4	10/22/2C10	11 54	1 51E+C3	2 22E+C2	1 12E+02	3 58E-0:	5 53E-0:	6 05E-01	-2 92E+00	5 78E+0C	5 94E-0C	1 19E-01	5 92E+00	7 73E+00	NA	NA	NA	
MW-46	002	105	7 6	4/12/2006	17 15	1 38E+C3	2 01E+C2	1 76E+02	6 24E-0:	4 82E-0:	4 39E-01	9 20E-01	2 58E+0C	3 31E-0C	-5 36E-01	2 67E+00	2 88E+00	NA	NA	NA	MW-46
	003	105	7 6	5/24/2006	12 55	6 23E+C2	2 24E+C2	1 87E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	003	105	7 6	5/24/2006	12 55	9 00E+C2	1 71E+C3	6 33E+02	3 07E-0:	6 15E-0:	7 47E-01	-7 76E-02	9 67E+0C	1 18E-01	5 33E-00	8 0CE+00	1 2:E+01	NA	NA	NA	
	004	105	7 6	6/13/2006	13 10	6 79E+C1	1 80E+C2	1 91E+02	3 46E 0:	1 04E+00	1 33E+00	2 58E+00	7 58E+0C	8 29E-0C	9 79E 01	8 2:E+00	9 8:E+00	NA	NA	NA	
	005	105	7 6	7/12/2006	13 23	7 06E1C2	2 36E1C2	1 92E102	5 77E-0:	1 21E100	1 23E100	3 92E100	9 37E100	1 09E 01	4 49E 00	3 6CE100	1 06E101	NA	NA	NA	
	006	105	7 6	8/4/2006	8 40	1 15E+C3	2 75E+C2	1 98E+02	NA	NA	NA	1 15E+00	5 C5E+0C	6 52E-0C	-3 C0E+0C	5 84E+00	5 97E+00	NA	NA	NA	
	007	105	7 6	9/13/2006	15 15	1 47E+C3	3 50E+C2	2 19E+02	NA	NA	NA	3 75E-01	6 C1E+0C	6 95E-0C	2 C3E+00	7 2/E+00	6 2/E+00	NA	NA	NA	
	008	105	7 6	6/14/2007	13 50	3 43E+C3	5 64E+C2	2 95E+02	2 15E-0:	4 55E-0:	5 35E-01	3 00E-01	3 52E+0C	4 37E-0C	8 52E-02	3 6:E+00	4 09E+00	-1 05E+00	1 52E+01	1 78E+01	
	009	105	7 6	8/1/2007	11 35	6 62E+C2	3 50E+C2	2 44E+02	7 09E-02	3 56E-0:	4 49E-01	6 63E-01	3 52E+0C	3 80E-0C	6 33E-02	2 43E+00	2 77E+00	NA	NA	NA	
	010	105	7 6	10/22/2C07	14 20	1 67E+C3	5 27E+C2	4 01E+02	2 17E-0:	4 72E-0:	5 44E-01	4 60E-01	2 57E+0C	3 34E-0C	-7 20E-01	2 94E+00	3 09E+00	NA	NA	NA	
	011	105	7 6	1/22/2008	12 19	5 49E+C2	1 74E+C2	1 70E+02	5 30E-0:	7 71E-0:	8 47E-01	-3 99E-0:	2 64E+0C	2 84E-0C	1 73E-00	2 6:E+00	3 3:E+00	NA	NA	NA	
	012	105	7 6	4/29/2008	16 00	5 21E+C2	1 53E+C2	2 20E+02	4 10E-0:	3 51E-0:	5 54E-01	7 87E-01	2 12E+0C	3 75E-0C	4 57E-01	2 24E+00	3 90E+00	NA	NA	NA	
	013	105	7 6	7/24/2008	16 56	7 71E+C2	2 75E+C2	3 77E+02	2 74E-0:	3 37E-0:	5 10E-01	6 05E-01	1 56E+0C	3 38E-0C	-1 59E+0C	2 1:E+00	3 09E+00	NA	NA	NA	
	014	105	7 6	10/20/2C08	15 27	1 38E+C3	6 44E+C2	5 89E+02	9 33E-0:	5 85E-0:	5 11E-01	-2 27E+00	5 C8E+0C	5 91E-0C	-5 88E-01	5 6:E+00	6 09E+00	NA	NA	NA	
	015	105	7 6	2/5/2009	13 46	1 00E+C3	2 88E+C2	1 26E+02	1 30Z 01	6 23E 0:	7 22E 01	1 68E+00	2 78E+0C	2 71E-0C	7 02E 01	2 8:E+00	3 28E+00	NA	NA	NA	
	016	105	7 6	4/10/2009	12 31	7 56E+C2	2 07E+C2	1 48E+02	-7 29Z-02	5 46E-0:	6 33E-01	9 83E-04	2 C8E+0C	3 72E-0C	1 54E-00	3 6:E+00	4 40E+00	NA	NA	NA	
	017	105	7 6	7/14/2009	13 57	8 32E+C2	2 72E+C2	2 30E+02	5 25E-01	7 99E-0:	8 38E-01	-1 37E-0:	3 C7E+0C	3 40E-0C	2 37E-00	4 07E+00	4 55E+00	NA	NA	NA	
	018	105	7 6	11/6/2009	13 24	1 10E+C3	1 6/E+C2	1 J/E+02	8 60E-01	5 J9E-0:	4 14E-01	2 85E+00	6 25E+0C	7 40E-0C	-3 66E+0C	5 12E+00	5 78E+00	NA	NA	NA	
	019	105	7 6	2/12/2010	12 44	1 13E+C3	2 12E+C2	1 82E+02	5 09E-0:	5 59E-0:	5 98E-01	1 41E+00	3 58E+0C	4 64E-0C	-1 64E+0C	5 63E+00	4 98E+00	NA	NA	NA	

See Page 32 for Notes

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	
MW-46	020	13 5	7 6	4/12/2010	11 32	7 62E+C2	1 92E+C2	1 77E+02	8 57E-0:	7 58E-0:	7 39E-01	-2 73E+00	1 08E+01	1 14E-01	-2 57E+0C	1 05E+01	1 13E+01	NA	NA	NA	MW-45
	021	13 5	7 6	7/23/2010	13 10	1 92E+C3	2 58E+C2	1 46E+02	1 00E-0:	5 53E-0:	6 59E-01	1 28E-01	7 65E+0C	8 12E-0C	-1 36E+0C	7 95E+00	8 34E+00	NA	NA	NA	
	022	13 5	7 6	10/28/2C10	13 25	3 13E+C3	3 08E+C2	1 13E+02	3 76E-0:	5 29E-0:	5 49E-01	-2 05E+00	5 65E+0C	5 88E-0C	2 98E-00	5 81E+00	8 22E+00	NA	NA	NA	
MW-47-56	002	53 2	17 1	4/13/2006	12 05	7 60E+C2	2 22E+C2	1 57E+02	2 27E+00	7 55E-0:	7 30E-01	8 27E-02	5 45E+0C	5 95E-0C	-4 55E-01	5 33E+00	5 77E+00	NA	NA	NA	MW-47-56
	003	53 2	17 1	7/18/2006	10 13	1 54E+C2	1 95E+C2	1 99E+02	1 91E-0:	1 47E+00	1 59E+00	3 10E+00	7 80E+0C	9 34E-0C	2 47E-00	1 04E+01	1 29E+01	NA	NA	NA	
	004	53 2	17 1	6/20/2007	10 07	NA	NA	NA	NA	NA	NA	0 00E+00	4 28E+0C	3 79E-0C	1 63E-00	3 17E+00	3 79E+00	3 81E+00	1 32E+01	1 51E+01	
	004	53 2	17 1	6/20/2007	10 07	5 29E+C2	1 95E+C2	1 85E+02	5 93E 0:	5 35E 0:	5 10E 01	0 00E+00	6 66E+0C	3 87E-0C	3 57E-00	3 71E+00	4 73E+00	NA	NA	NA	
	005	53 2	17 1	8/10/2007	11 00	2 70E+C2	1 80E+C2	2 32E+02	5 07E-0:	0 34E-0:	8 21E-01	-3 34E-0:	3 40E+0C	3 75E 0C	1 49E-01	2 94E+00	3 37E+00	NA	NA	NA	
MW-47-80	001	74	-3 7	4/13/2006	11 45	2 33E+C3	4 28E+C2	2 29E+02	2 73E+00	7 35E-0:	6 33E-01	-5 82E-0:	4 48E+0C	5 14E-0C	2 25E-01	3 91E+00	4 76E+00	NA	NA	NA	MW-47-80
	002	74	-3 7	7/18/2006	8 51	1 87E+C3	3 87E+C2	2 58E+02	2 36E+00	1 45E+00	1 42E+00	1 67E+00	1 03E+01	1 19E-01	2 59E-00	2 21E+00	1 09E+01	NA	NA	NA	
	003	74	-3 7	6/19/2007	11 00	2 36E+C3	5 94E+C2	3 58E+02	3 27E+00	8 98E-0:	5 38E-01	2 05E+00	3 81E+0C	4 58E-0C	-2 27E+0C	4 82E+00	3 92E+00	4 08E-01	1 16E+01	1 38E+01	
	004	74	-3 7	8/10/2007	12 21	3 51E+C3	7 25E+C2	4 52E+02	3 55E+00	1 21E+00	9 05E-01	-9 39E-02	3 21E+0C	3 56E-0C	-8 20E-02	3 13E+00	3 50E+00	NA	NA	NA	
MW-48-23	001	20 4	-5	2/8/2006	10 10	1 66E+C2	3 26E+C2	3 42E+02	1 93E-0:	5 34E-0:	5 34E-01	-2 14E-0:	1 04E+01	1 13E-01	1 45E+00	9 95E+00	1 12E+01	NA	NA	NA	MW-48-23
	002	20 4	-5	4/12/2006	9 58	1 24E+C2	4 08E+C2	4 52E+02	-1 10E-01	3 90E-0:	4 40E-01	3 25E+00	9 95E+0C	7 26E-0C	2 49E-00	7 47E+00	6 18E+00	NA	NA	NA	
	003	20 4	-5	4/27/2006	13 42	2 38E+C2	1 94E+C2	2 03E+02	-2 50E-02	4 58E-0:	5 34E-01	-1 88E+00	5 06E+0C	5 65E-0C	-1 19E-01	4 42E+00	5 27E+00	NA	NA	NA	
	004	20 4	-5	5/22/2006	10 30	7 45E+C2	4 26E+C2	4 46E+02	2 42E-0:	2 88E-0:	3 10E-01	3 22E+00	9 67E+0C	7 12E-0C	4 29E-00	1 29E+01	9 67E+00	NA	NA	NA	
	005	20 4	-5	6/9/2006	11 15	7 37E+C2	2 09E+C2	1 56E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	005	20 4	5	6/9/2006	11 15	2 95E+C2	4 14E+C2	4 53E+02	3 10E 0:	9 88E 0:	1 26E+00	1 09E+00	5 21E+0C	5 80E-0C	3 08E-00	5 41E+00	5 96E+00	NA	NA	NA	
	005	20 4	-5	6/9/2006	11 15	6 03E+C1	4 39E+C2	6 24E+02	3 70E-0:	3 50E-0:	4 30E-01	2 29E+00	7 76E+0C	5 90E-0C	3 25E-00	9 74E+00	7 61E+00	1 66E+01	1 53E+01	1 62E+01	
	006	20 4	-5	7/6/2006	12 00	4 21E+C2	4 17E+C2	4 52E+02	-2 20E-01	4 20E-0:	4 90E-01	2 55E+00	7 64E+0C	5 49E-0C	2 60E-00	7 79E+00	5 78E+00	NA	NA	NA	
	007	20 4	-5	8/8/2006	10 30	1 04E+C2	1 68E+C2	1 72E+02	7 00E-02	6 30E-0:	7 30E-01	1 95E+00	4 76E+0C	5 56E-0C	1 99E-00	4 41E+00	5 37E+00	NA	NA	NA	
	008	20 4	-5	9/5/2006	10 05	2 44E+C1	1 59E+C2	1 72E+02	-6 00E-02	7 80E-0:	8 50E-01	-2 90E+00	7 62E+0C	8 12E-0C	1 05E-01	8 53E+00	1 02E+01	NA	NA	NA	
	009	20 4	-5	1/22/2006	9 23	1 67E+C2	4 08E+C2	4 50E+02	-7 00E-02	6 30E-0:	7 10E-01	3 91E+00	1 17E+01	8 71E-0C	3 22E-00	9 67E+00	7 76E+00	NA	NA	NA	
	010	20 4	-5	2/9/2007	10 54	2 72E+C2	1 68E+C2	1 70E+02	-1 60E-01	1 53E+00	1 70E+00	3 70E-01	1 80E+0C	2 00E-0C	8 30E-01	2 07E+00	2 30E+00	NA	NA	NA	
	011	20 4	-5	8/16/2007	11 00	3 93E+C2	1 64E+C2	1 51E+02	-3 94E-01	5 59E-0:	8 47E-01	1 66E+00	4 52E+0C	3 58E-0C	5 36E-01	3 03E+00	3 55E+00	NA	NA	NA	
MW-48-37	001	36	-20 6	2/10/2006	14 10	1 00E+C1	4 26E+C2	4 73E+02	NA	NA	NA	1 18E+00	3 54E+0C	2 53E-0C	2 07E-00	5 21E+00	4 39E+00	NA	NA	NA	MW-48-37
	002	36	-20 6	4/12/2006	10 00	-5 40E+01	4 02E+C2	4 52E+02	2 10E-0:	3 90E-0:	4 40E-01	1 50E+00	5 09E+0C	3 53E-0C	3 34E-00	1 03E+01	6 89E+00	NA	NA	NA	
	003	36	20 6	4/27/2006	13 20	2 15E+02	1 77E+C2	2 34E+02	4 96E 02	3 79E 0:	4 20E 01	7 95E+00	9 51E+0C	1 01E-01	3 17E 01	8 42E+00	9 20E+00	NA	NA	NA	
	004	36	-20 6	5/22/2006	10 00	1 39E+C2	4 02E+C2	4 46E+02	-1 20E-01	3 60E-0:	4 10E-01	1 25E+00	4 65E+0C	2 94E 0C	2 31E 00	5 94E+00	5 00E+00	NA	NA	NA	
	005	36	-20 6	6/9/2006	11 30	1 43E+C2	1 67E+C2	1 56E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	005	36	-20 6	6/9/2006	11 30	5 96E+C2	1 58E+C3	6 24E+02	1 05E-0:	7 89E-0:	1 03E+00	1 10E+00	5 71E+0C	6 44E-0C	-1 28E+0C	5 23E+00	5 52E+00	NA	NA	NA	
	005	36	-20 6	6/9/2006	11 30	1 66E+C2	4 11E+C2	4 53E+02	2 38E+00	4 50E-0:	4 30E-01	2 40E+00	7 20E+0C	4 95E-0C	4 14E-00	1 24E+01	8 50E+00	4 58E+00	1 35E+01	1 46E+01	
	006	36	-20 6	7/6/2006	8 45	1 47E+C2	4 08E+C2	4 52E+02	1 70E-0:	8 10E-0:	8 30E-01	2 10E+00	6 31E+0C	4 44E-0C	4 21E-00	1 25E+01	8 77E+00	NA	NA	NA	
	007	36	-20 6	8/8/2006	10 20	1 09E+C1	1 55E+C2	1 59E+02	6 00E-02	6 90E-0:	7 30E-01	1 86E+00	5 68E+0C	6 65E-0C	2 55E-01	5 22E+00	5 93E+00	NA	NA	NA	
	008	36	-20 6	9/5/2006	10 20	5 73E+C2	2 12E+C2	1 75E+02	0 00E+00	6 90E-0:	7 70E-01	-2 86E-0:	5 59E+0C	6 04E-0C	1 60E-00	5 35E+00	6 37E+00	NA	NA	NA	
	009	36	-20 6	1/22/2006	9 34	2 62E+C2	4 11E+C2	4 50E+02	0 00E+00	6 30E-0:	7 00E-01	1 60E+00	4 80E+0C	3 39E-0C	3 58E-00	1 07E+01	7 47E+00	NA	NA	NA	
	010	36	-20 6	2/9/2007	10 59	2 70E+C1	1 65E+C2	1 70E+02	-1 40E-01	1 38E+00	1 50E+00	-6 10E-0:	1 26E+0C	1 50E-0C	-4 70E-01	1 33E+00	1 60E+00	NA	NA	NA	
	011	36	-20 6	8/16/2007	11 07	1 29E+C2	1 59E+C2	1 75E+02	4 11E-02	6 27E-0:	7 34E-01	1 78E+00	4 35E+0C	4 53E-0C	4 00E-01	4 51E+00	5 01E+00	NA	NA	NA	
MW-49-26	001	19 1	-4 4	3/22/2006	16 50	1 54E+C4	2 01E+C3	1 32E+03	1 34E+01	9 26E-0:	4 20E-01	-5 20E-0:	9 40E+0C	1 02E 01	-1 35E+0C	3 93E+00	2 69E+00	NA	NA	NA	MW-49-26
	003	19 1	-4 4	5/19/2006	14 55	1 42E+C4	6 75E+C3	6 29E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	003	19 1	-4 4	5/19/2006	14 55	9 40E+C3	1 50E+C3	4 26E+02	9 33E+00	9 40E-0:	5 45E-01	2 65E+00	7 87E+0C	9 09E-0C	1 15E-00	5 99E+00	6 92E+00	NA	NA	NA	
	004	19 1	-4 4	6/6/2006	9 55	1 40E+C4	2 16E+C3	4 25E+02	1 41E+01	1 17E+00	5 30E-01	6 14E+00	1 18E+01	1 41E-01	2 42E-00	1 02E+01	1 27E+01	NA	NA	NA	
	005	19 1	-4 4	7/7/2006	9 15	1 00E+C4	2 06E+C3	1 51E+03	1 26E+01	2 67E+00	1 51E+00	1 28E+00	8 45E+0C	9 49E-0C	-1 98E+0C	8 42E+00	8 90E+00	NA	NA	NA	
	006	19 1	-4 4	8/1/2006	9 28	1 37E+C4	1 13E+C3	6 16E+02	NA	NA	NA	-5 93E+00	6 06E+0C	4 56E-0C	-3 09E+0C	5 14E+00	4 31E+00	3 67E+01	3 09E+01	3 26E+01	
	007	19 1	-4 4	8/28/2006	12 30	1 10E+C4	1 12E+C3	7 58E+02	NA	NA	NA	-2 69E+00	5 42E+0C	5 50E-0C	-3 57E+0C	4 73E+00	3 71E+00	NA	NA	NA	
	008	19 1	-4 4	1/15/2006	11 28	6 39E+C3	1 38E+C3	1 00E+03	1 55E+01	1 95E+00	7 70E-01	8 00E-01	3 00E+0C	3 40E-0C	-3 00E-01	4 23E+00	5 00E+00	8 40E+00	2 04E+01	2 20E+01	
	009	19 1	-4 4	6/26/2007	12 30	7 76E+C3	3 48E+C2	1 79E+02	1 27E+01	1 40E+00	7 13E-01	1 36E+00	2 55E+0C	2 83E-0C	-8 28E-01	2 23E+00	2 31E+00	-1 92E+00	1 28E+01	1 50E+01	
	010	19 1	-4 4	8/9/2007	11 17	6 72E+C3	9 50E+C2	4 52E+02	1 43E+01	2 16E+00	9 36E-01	4 09E-01	3 72E+0C	4 23E-0C	2 50E-00	3 51E+00	4 54E+00	7 99E-01	2 07E+01	2 49E+01	
	011	19 1	-4 4	1/28/2008	16 28	4 21E+C3	5 76E+C2	2 98E+02	2 39E+01	2 10E+00	8 52E 01	1 19E+00	1 55E+0C	2 07E-0C	4 31E 01	1 97E+00	2 29E+00	5 16E+00	1 53E+01	1 75E+01	
	012	19 1	-4 4	4/25/2008	12 45	5 00E+C3	3 13E+C2	1 44E+02	1 31E+01	1 32E+00	5 59E-01	2 60E+00	2 30E+0C	4 34E 0C	2 03E 00	2 22E+00	4 14E+00	1 76E+00	1 19E+01	2 05E+01	
	013	19 1	-4 4	7/30/2008	15 03	3 96E+C3	1 73E+C2	1 30E+02	1 52E+01	1 27E+00	8 36E-01	-9 75E-0:	1 74E+0C	2 74E-0C	1 31E-00	2 17E+00	3 93E+00	-2 81E+00	1 64E+01	2 92E+01	
	014	19 1	-4 4	11/5/2008	15 54	5 47E+C3	4 23E+C2	1 91E+02	1 53E+01	2 96E+00	6 10E-01	-1 56E+00	5 63E+0C	5 26E-0C	-5 71E-01	4 63E+00	5 18E+00	2 96E+00	1 71E+01	2 02E+01	
	015	19 1	-4 4	2/6/2009	13 03	3 10E+C3	2 66E+C2	1 59E+02	1 38E+01	1 91E+00	8 59E-01	1 77E+00	4 34E+0C	4 54E-0C	1 25E-00	3 55E+00	4 24E+00	2 31E+01	2 21E+01	2 42E+01	
	016	19 1	-4 4	5/6/2009	10 46	3 20E+C3	4 05E+C2	1 80E+02	1 50E+01	1 85E+00	4 90E-01	2 93E+00	7 51E+0C	5 27E-0C	2 01E-01	3 73E+00	4 33E+00	7 21E-01	1 67E+01	1 91E+01	
	017	19 1	-4 4	8/7/2009	10 50	3 56E+C3	2 97E+C2	1 79E+02	1 23E+01	1 64E+00	6 79E-01	-9 22E-0:	3 27E+0C	3 47E-0C	-1 44E+0C	3 63E+00	3 60E+00	4 77E+00	1 95E+01	2 22E+01	
	018	19 1	-4 4	10/29/2009	13 14	3 17E+C3	2 91E+C2	1 88E+02	1 33E+01	1 71E+00	8 20E-01	7 51E-01	6 13E+0C	6 91E-0C	0 00E-00	5 33E+00	5 96E+00	-4 26E+00	1 72E+01	2 00E+01	
	019	19 1	-4 4	2/22/2010	14 35	2 82E+C3	2 70E+C2	1 74E+02	1 36E+01	1 92E+00	8 52E-01	2 49E+00	5 76E+0C	6 86E-0C	-1 91E-01	5 73E+00	6 41E+00	-5 01E+00	1 84E+01	2 16E+01	
	020	19 1	-4 4	4/21/2010	14 42	3 00E+C3	3 30E+C2	1 88E+02	1 55E+01	2 44E+00	8 19E-01	2 89E+00	7 32E+0C	8 92E-0C	-2 28E-01	9 17E+00	1 07E+01	-7 28E+00	1 95E+01	2 26E+01	
	021	19 1	-4 4	8/11/2010	11 27	3 03E+C3	3 03E+C2	1 27E+02	1 28E+01	1 44E+00	3 56E-01	-7 91E-0:	1 14E+01	1 15E-01	-1 56E+0C	1 13E+01	1 19E+01	3 27E-01	1 64E+01	1 92E+01	
	022	19 1	-4 4	11/11/2C10	14 23	2 59E+C3	3 00E+C2	1 76E+02	3 42E 01	9 56E 0:	2 34E+00	1 62E+00	1 54E+0C	1 15E-01	1 13E-00	3 95E+00	2 11E+00	1 79E+00	1 02E+01	2 29E+01	
MW-49-42	001	38 1	-23 4	3/22/2006	16 45	1 13E+C4	2 52E+C3	1 83E+03	1 34E+01	1 04E+00	4 30E-01	3 30E+00	1 19E+01	1 32E-01	-4 57E+0C	1 11E+01	1 14E+01	NA	NA	NA	MW-49-42
	003	38 1	-23 4	5/19/2006	15 07	8 83E+C3	5 33E+C3	6 29E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	003	38 1	-23 4	5/19/2006	15 07	9 89E+C3	1 49E+C3	4 90E+02	1 20E+01	9 57E-0:	4 54E-01	2 16E+00	1 09E+01	1 56E-01	3 95E-00	1 42E+01	1 63E+01	NA	NA	NA	
	004	38 1	-23 4	6/6/2006	10 10	8 28E+C3	1 32E+C3	3 86E+02	1 53E+01	1 27E+00	5 57E-01	2 88E+00	1 37E+01	1 58E-01	-1 26E+0C	1 07E+01	1 13E+01	NA	NA	NA	

J:\17,000-18,999\17869\17869-92.MGQ\4-2010\FINAL\Tables\;
Table 5 - Historic Groundwater Analytical Results.xlsx;
Table5

See Page 32 for Notes

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	
MW-49-42	005	38.1	-23.4	7/7/2006	9:15	5.85E+03	1.02E+03	1.52E+03	1.92E+01	3.33E+00	1.49E+00	2.01E+00	1.14E+01	1.30E-01	-1.61E+00	1.03E+01	1.11E+01	NA	NA	NA	MW-49-42
	006	38.1	-23.4	8/1/2006	9:40	8.80E+03	9.68E+02	6.16E+02	NA	NA	NA	-4.22E+00	9.33E+00	8.64E-00	-1.54E+00	8.73E+00	8.99E+00	8.06E+00	9.86E+00	1.05E+01	
	007	38.1	-23.4	8/28/2006	12:40	8.69E+03	9.57E+02	6.10E+02	NA	NA	NA	-8.31E-02	1.65E+01	1.16E-01	-6.74E+00	9.43E+00	6.18E+00	NA	NA	NA	
	008	38.1	-23.4	11/15/2006	14:21	6.19E+03	1.38E+03	1.30E+03	2.11E+01	2.46E+00	8.10E-01	-6.50E-01	2.25E+00	2.60E-00	1.18E-00	2.34E+00	2.60E+00	2.60E+00	5.70E+00	6.20E+00	
	009	38.1	-23.4	6/26/2007	12:30	4.44E+03	2.90E+02	1.86E+02	2.38E+01	1.65E+00	6.22E-01	-3.52E-01	4.56E+00	4.32E-00	-2.09E+00	3.65E+00	3.54E+00	-5.19E+00	1.30E+01	1.54E+01	
	010	38.1	-23.4	8/9/2007	17:05	4.30E+03	7.91E+02	4.59E+02	2.56E+01	2.77E+00	8.79E-01	-1.17E+00	3.77E+00	3.37E-00	2.77E-00	3.53E+00	4.56E+00	4.01E-01	2.10E+01	2.46E+01	
	011	38.1	-23.4	1/28/2008	15:49	2.81E+03	4.92E+02	2.98E+02	2.34E+01	2.57E+00	5.58E-01	8.68E-01	2.10E+00	2.43E-00	8.96E-01	2.13E+00	2.52E+00	5.79E+00	1.73E+01	1.97E+01	
	012	38.1	-23.4	4/25/2008	12:30	3.20E+03	2.54E+02	1.44E+02	2.33E+01	1.49E+00	5.34E-01	4.07E-01	1.62E+00	3.10E-00	5.51E-01	2.37E+00	4.13E+00	-1.03E+00	1.17E+01	2.04E+01	
	013	38.1	-23.4	7/30/2008	15:06	2.52E+03	1.45E+02	1.30E+02	2.16E+01	1.41E+00	6.39E-01	4.49E-01	1.29E+00	2.79E-00	7.56E-01	1.73E+00	3.09E+00	-2.73E+00	1.59E+01	2.84E+01	
	014	38.1	-23.4	11/5/2008	14:31	2.94E+03	4.04E+02	1.97E+02	2.16E+01	2.30E+00	7.31E-01	-1.27E+00	6.53E+00	6.92E-00	-1.53E+00	8.13E+00	7.46E+00	4.70E+00	1.84E+01	2.05E+01	
	015	38.1	-23.4	2/6/2009	9:57	2.25E+03	2.40E+02	1.70E+02	2.37E+01	2.37E+00	9.73E-01	1.38E+00	3.51E+00	4.09E-00	-2.43E+00	3.33E+00	3.11E+00	-2.15E+00	2.15E+01	2.48E+01	
	016	38.1	-23.4	5/6/2009	14:27	2.50E+03	3.63E+02	1.79E+02	1.75E+01	2.04E+00	4.71E-01	1.31E+00	7.25E+00	4.83E-00	1.78E-01	4.17E+00	4.49E+00	-7.29E+00	1.67E+01	1.94E+01	
	017	38.1	-23.4	8/7/2009	10:55	2.68E+03	2.69E+02	1.79E+02	1.75E+01	1.92E+00	6.96E-01	-3.55E-01	3.48E+00	3.79E-00	9.35E-01	3.35E+00	3.95E+00	-7.87E+00	1.49E+01	1.75E+01	
	018	38.1	-23.4	10/29/2009	13:04	2.51E+03	2.70E+02	1.88E+02	1.74E+01	1.91E+00	7.50E-01	6.14E-01	6.27E+00	7.22E-00	-9.32E-02	7.29E+00	8.25E+00	-9.35E+00	1.73E+01	2.03E+01	
	019	38.1	-23.4	2/22/2010	14:43	2.20E+03	2.49E+02	1.75E+02	1.35E+01	2.42E+00	7.57E-01	-2.91E-01	5.17E+00	5.65E-00	1.19E-00	5.75E+00	6.62E+00	1.66E-01	1.95E+01	2.25E+01	
	020	38.1	-23.4	4/21/2010	14:49	2.76E+03	3.76E+02	1.43E+02	1.75E+01	2.78E+00	7.31E-01	-5.61E+00	6.67E+00	6.01E-00	-1.68E+00	7.53E+00	7.64E+00	-3.23E+00	2.10E+01	2.51E+01	
	021	38.1	-23.4	8/11/2010	11:00	2.27E+03	2.72E+02	1.30E+02	1.35E+01	1.67E+00	3.31E-01	4.80E+00	7.88E+00	9.85E-00	-2.34E+00	8.73E+00	9.06E+00	-1.91E+00	1.65E+01	1.96E+01	
	022	38.1	-23.4	11/11/2010	14:13	2.39E+03	2.73E+02	1.22E+02	1.29E+01	1.65E+00	1.12E+00	8.48E-01	6.29E+00	9.79E-00	3.75E-00	5.42E+00	1.30E+01	4.06E+00	8.14E+00	1.86E+01	
MW-49-65	001	60	-45.4	3/22/2006	16:55	5.43E+03	2.13E+03	1.82E+03	1.33E+01	1.01E+00	4.13E-01	1.56E+00	1.43E+01	1.72E-01	5.51E-00	1.37E+01	1.81E+01	NA	NA	NA	MW-49-65
	003	60	-45.4	5/19/2006	15:55	5.75E+03	4.30E+03	6.29E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	003	60	-45.4	5/19/2006	15:55	5.70E+03	9.88E+02	5.84E+02	1.13E+01	8.98E-01	4.88E-01	-2.86E+00	8.51E+00	8.67E-00	-1.43E-01	9.32E+00	1.03E+01	NA	NA	NA	
	004	60	-45.4	6/6/2006	10:40	4.32E+03	7.20E+02	2.88E+02	1.72E+01	1.30E+00	6.17E-01	4.52E+00	1.41E+01	1.63E-01	4.24E-00	1.23E+01	1.52E+01	NA	NA	NA	
	005	60	-45.4	7/7/2006	9:10	4.63E+03	1.73E+03	1.52E+03	1.56E+01	3.34E+00	1.86E+00	-2.76E+00	6.49E+00	6.88E-00	1.84E-00	5.45E+00	7.36E+00	NA	NA	NA	
	006	60	-45.4	8/1/2006	10:00	5.76E+03	8.48E+02	6.14E+02	NA	NA	NA	-1.30E+00	6.64E+00	7.48E-00	-6.55E-01	8.13E+00	9.78E+00	5.75E+00	1.06E+01	1.15E+01	
	007	60	-45.4	8/28/2006	12:35	5.54E+03	8.40E+02	6.16E+02	NA	NA	NA	-4.07E+00	9.28E+00	9.08E-00	-1.27E+00	7.42E+00	7.60E+00	NA	NA	NA	
	008	60	-45.4	11/15/2006	13:46	3.04E+03	1.20E+03	1.30E+03	1.92E+01	2.31E+00	8.40E-01	2.12E+00	2.61E+00	2.80E-00	3.00E-01	2.07E+00	2.40E+00	-1.80E+00	6.90E+00	7.70E+00	
	009	60	-45.4	6/26/2007	12:30	2.67E+03	2.45E+02	1.85E+02	1.58E+01	1.58E+00	8.28E-01	-1.36E-03	3.06E+00	3.38E-00	-3.59E+00	4.33E+00	3.75E+00	-7.41E+00	1.41E+01	1.68E+01	
	010	60	-45.4	8/9/2007	11:20	2.41E+03	6.42E+02	4.50E+02	2.38E+01	2.40E+00	9.11E-01	3.44E-01	2.76E+00	3.13E-00	1.65E-00	3.03E+00	3.73E+00	3.56E+00	2.17E+01	2.49E+01	
	011	60	-45.4	1/28/2008	16:52	1.05E+03	4.22E+02	2.25E+02	2.73E+01	2.79E+00	6.29E-01	2.83E+00	3.72E+00	3.81E-00	-1.63E+00	3.17E+00	3.09E+00	-1.01E+01	1.95E+01	2.20E+01	
	012	60	-45.4	4/25/2008	13:13	1.93E+03	1.86E+02	1.96E+02	1.90E+01	6.52E-01	3.54E-01	-8.45E-02	1.53E+00	3.28E-00	-1.40E-01	2.22E+00	3.84E+00	6.81E+00	9.59E+00	1.62E+01	
	013	60	-45.4	7/30/2008	13:28	1.56E+03	1.23E+02	1.30E+02	1.78E+01	1.29E+00	5.31E-01	-4.77E-01	2.20E+00	3.63E-00	8.42E-02	2.02E+00	3.39E+00	-5.53E+00	1.63E+01	2.96E+01	
	014	60	-45.4	11/5/2008	14:43	1.26E+03	3.02E+02	1.92E+02	1.72E+01	2.23E+00	5.97E-01	-4.96E+00	6.60E+00	6.62E-00	2.51E-00	5.11E+00	7.41E+00	3.42E-01	1.80E+01	2.06E+01	
	015	60	-45.4	2/6/2009	9:59	1.42E+03	2.10E+02	1.70E+02	1.73E+01	2.10E+00	9.15E-01	-9.15E-01	2.56E+00	3.20E-00	7.61E-01	2.64E+00	3.21E+00	2.70E+00	2.22E+01	2.54E+01	
	016	60	-45.4	5/6/2009	15:18	1.34E+03	2.05E+02	1.80E+02	1.28E+01	1.79E+00	7.13E-01	1.40E-01	4.37E+00	2.91E-00	-3.07E-01	2.99E+00	3.02E+00	-1.93E+00	1.79E+01	2.05E+01	
	017	60	-45.4	8/7/2009	12:48	1.64E+03	2.33E+02	1.80E+02	1.24E+01	1.62E+00	7.16E-01	5.00E-01	3.13E+00	3.54E-00	5.17E-01	3.22E+00	3.76E+00	-3.23E+00	1.86E+01	2.15E+01	
	018	60	-45.4	10/29/2009	13:15	1.66E+03	2.39E+02	1.88E+02	1.14E+01	1.58E+00	8.16E-01	1.01E+00	9.45E+00	8.96E-00	1.59E-00	8.53E+00	8.81E+00	-5.66E+00	1.71E+01	2.00E+01	
	019	60	-45.4	2/22/2010	13:57	1.42E+03	2.19E+02	1.74E+02	1.55E+01	2.34E+00	7.71E-01	-6.73E-01	5.14E+00	5.79E-00	1.50E-00	4.53E+00	5.47E+00	-5.53E+00	1.81E+01	2.13E+01	
	020	60	-45.4	4/23/2010	15:17	1.55E+03	2.63E+02	1.50E+02	1.34E+01	1.95E+00	6.37E-01	6.11E+00	1.36E+01	9.18E-00	-2.53E-01	1.17E+01	1.35E+01	-1.29E+01	1.96E+01	2.32E+01	
	021	60	-45.4	8/11/2010	11:19	1.32E+03	2.16E+02	1.20E+02	1.24E+01	1.44E+00	4.40E-01	-1.12E+01	1.22E+01	1.43E-01	-2.50E-01	2.03E+00	1.11E+01	-6.74E-01	1.00E+01	2.13E+01	
	022	60	-45.4	11/11/2010	14:10	1.37E+03	2.34E+02	3.97E+02	1.41E+01	1.45E+00	1.34E+00	6.99E+00	6.08E+00	1.07E-01	3.39E-01	5.37E+00	1.18E+01	-3.41E+00	9.31E+00	2.09E+01	
MW-50-42	001	42	-27.1	3/22/2006	14:25	9.75E+03	5.78E+02	2.14E+02	1.93E+01	1.12E+00	4.76E-01	-1.36E+00	9.50E+00	1.13E-01	-5.74E-01	8.55E+00	1.02E+01	4.01E+00	1.34E+01	1.46E+01	MW-50-42
	003	42	-27.1	5/19/2006	13:55	4.58E+03	3.84E+03	6.30E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	003	42	-27.1	5/19/2006	13:55	4.59E+03	7.74E+02	3.53E+02	1.95E+01	1.25E+00	4.77E-01	4.84E+00	8.95E+00	1.18E-01	-4.07E-01	3.17E+00	1.02E+01	NA	NA	NA	
	004	42	-27.1	6/7/2006	9:00	1.79E+02	1.89E+02	1.56E+02	3.34E+00	7.52E-01	6.06E-01	1.15E-01	7.81E+00	8.62E-00	-1.70E+00	7.37E+00	7.69E+00	NA	NA	NA	
	005	42	-27.1	7/3/2006	11:35	3.98E+02	2.18E+02	2.22E+02	3.45E+00	2.00E+00	1.65E+00	6.90E+00	1.38E+01	1.65E-01	4.75E-00	1.04E+01	1.30E+01	NA	NA	NA	
	006	42	-27.1	8/1/2006	11:20	1.41E+03	6.42E+02	6.14E+02	NA	NA	NA	8.99E+00	1.01E+01	1.33E-01	6.21E-00	9.25E+00	1.24E+01	1.12E+01	1.52E+01	1.64E+01	
	007	42	-27.1	8/28/2006	11:50	3.11E+02	1.89E+02	1.76E+02	NA	NA	NA	1.97E+00	5.84E+00	6.74E-00	3.49E-00	5.35E+00	7.93E+00	NA	NA	NA	
	008	42	-27.1	11/15/2006	11:50	1.70E+03	1.11E+03	1.30E+03	1.13E+01	1.56E+00	8.30E-01	7.20E+00	4.20E+00	4.30E-00	-9.00E-01	3.03E+00	3.80E+00	-1.20E+00	6.00E+00	6.70E+00	
	009	42	-27.1	6/26/2007	14:30	2.15E+02	1.71E+02	1.86E+02	1.16E+01	1.35E+00	7.51E-01	1.91E+00	4.44E+00	5.12E-00	1.64E+00	4.22E+00	3.94E+00	5.30E+00	1.87E+01	2.15E+01	
	010	42	-27.1	7/26/2007	11:20	1.45E+02	1.74E+02	1.93E+02	1.24E+01	1.31E+00	5.31E-01	-5.50E+00	4.71E+00	3.63E-00	2.53E-00	3.39E+00	4.32E+00	4.92E+00	1.91E+01	2.15E+01	
	011	42	-27.1	10/18/2007	14:08	1.01E+02	1.76E+02	1.97E+02	2.45E+01	2.32E+00	5.74E-01	3.02E-01	3.38E+00	3.87E-00	6.26E-01	3.73E+00	3.81E+00	-9.14E-01	1.62E+01	1.87E+01	
	013	42	-27.1	2/26/2008	12:19	6.15E+02	2.94E+02	2.87E+02	2.40E+01	8.51E-01	7.54E-01	-1.92E+00	4.80E+00	4.66E-00	1.77E+00	3.92E+00	4.68E+00	1.71E+01	2.40E+01	2.67E+01	
	014	42	-27.1	7/31/2008	15:43	3.73E+02	1.34E+02	1.91E+02	9.38E+00	8.56E-01	4.39E-01	-9.40E-01	1.59E+00	3.20E-00	9.53E-01	1.91E+00	3.44E+00	1.58E+01	1.76E+01	2.96E+01	
	015	42	-27.1	11/6/2008	10:44	1.29E+02	1.76E+02	1.92E+02	2.56E+00	9.87E-01	6.35E-01	1.65E+00	4.58E+00	5.77E-00	5.18E-01	5.35E+00	6.17E+00	0.00E+00	1.76E+01	2.03E+01	
	016	42	-27.1	1/22/2009	15:23	2.15E+02	1.38E+02	1.48E+02	1.96E+00	8.06E-01	6.31E-01	-1.74E+00	2.48E+00	2.37E-00	-5.18E-01	2.31E+00	2.39E+00	-3.34E+00	1.74E+01	2.03E+01	
	017	42	-27.1	5/5/2009	14:11	3.92E+02	1.95E+02	1.72E+02	2.38E+00	8.93E-01	6.96E-01	5.89E-01	9.20E+00	6.13E-00	-2.50E+00	5.75E+00	5.71E+00	-9.99E+00	2.07E+01	2.42E+01	
	018	42	-27.1	8/7/2009	13:13	1.06E+03	2.09E+02	1.79E+02	5.33E+00	1.25E+00	7.23E-01	-7.54E-02	3.66E+00	4.14E-00	3.08E-01	3.27E+00	3.73E+00	-1.25E+01	1.64E+01	1.94E+01	
	019	42	-27.1	10/26/2009	14:41	4.09E+02	1.83E+02	1.88E+02	6.73E+00	1.09E+00	4.53E-01	-3.87E+00	1.01E+01	1.12E-01	2.52E-01	5.67E+00	7.45E+00	-1.40E+01	1.86E+01	2.22E+01	
	020	42	-27.1	2/19/2010	12:52	3.73E+02	1.71E+02	1.74E+02	5.56E+00	1.42E+00	8.15E-01	2.91E+00	5.42E+00	6.46E-00	3.03E-00	5.18E+00	7.39E+00	-1.37E+01	1.89E+01	2.23E+01	
	021	42	-27.1	4/30/2010	12:34	1.36E+03	2.46E+02	1.58E+02	4.36E+00	1.33E+00	8.38E-01	8.49E-01	7.56E+00	8.38E-00	1.57E+00	5.02E+00	5.04E+00	1.19E+01	2.25E+01	2.61E+01	
	022	42	-27.1	8/4/2010	13:11	1.61E+02	1.25E+02	1.28E+02	8.43E+00	1.42E+00	5.53E-01	-1.94E+00	8.05E+00	9.23E-00	1.30E-01	8.02E+00	9.05E+00	0.00E+00	1.59E+01	1.88E+01	
	023	42	-27.1	11/12/2010	12:10	8.67E+02	1.83E+02	1.22E+02	3.73E+00	1.31E+00	9.39E-01	2.40E+00	5.71E+00	6.76E-00	2.73E-00	5.53E+00	6.94E+00	-7.36E+00	1.79E+01	2.15E+01	
MW-50-66	001	60	-45.1	3/22/2006	14:50	6.81E+03	4.94E+02	2.13E+02	2.35E+01	1.21E+00	4.40E-01	-7.67E+00	1.60E+01	1.66E-01	-2.18E+00	1.63E+01	1.81E+01	5.32E+00	1.35E+01	1.47E+01	MW-50-66
	003	60	-45.1	5/19/2006	15:20	1.08E+04	5.90E+03	6.30E+02	NA	NA	NA	3.23E+00	1.66E+01	1.23E-01	7.78E-01	1.12E+01	1.25E+01	NA	NA	NA	

See Page 32 for Notes

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	
MW-50-66	003	60	-45 1	5/19/2006	15 20	9 61E+C3	1 52E+C3	4 94E+02	1 95E+01	1 22E+00	5 16E-01	NA	NA	NA	NA	NA	NA	NA	NA	NA	MW-50-66
	004	60	-45 1	6/7/2006	9 20	1 05E+C4	1 65E+C3	4 29E+02	1 38E+01	1 18E+00	4 56E-01	-1 97E+00	8 71E+00	9 38E−00	2 49E−00	8 93E+00	1 04E+01	NA	NA	NA	
	005	60	-45 1	7/3/2006	11 00	8 62E+C3	2 00E+C3	1 52E+03	2 33E+01	3 79E+00	1 67E+00	-2 04E+00	9 54E+00	1 02E−01	4 40E-01	8 34E+00	9 23E+00	NA	NA	NA	
	006	60	-45 1	8/1/2006	9 28	7 93E+C3	9 36E+C2	6 16E+02	NA	NA	NA	5 59E-01	5 58E+00	6 68E−00	-4 31E+00	5 13E+00	5 00E+00	1 06E+01	1 06E+01	1 13E+01	
	007	60	-45 1	8/28/2006	12 05	6 77E+C3	1 59E+C3	1 30E+03	NA	NA	NA	7 66E-02	4 67E+00	5 86E−00	1 34E−00	4 23E+00	5 88E+00	NA	NA	NA	
	008	60	-45 1	1/31/2006	10 37	5 05E+C3	1 37E+C3	1 70E+03	2 15E+01	2 34E+00	8 10E-01	2 00E-01	3 30E+00	3 70E−00	2 67E−00	3 33E+00	3 50E+00	1 50E+00	1 70E+00	1 30E+00	
	009	60	-45 1	6/26/2007	14 02	4 21E+C3	2 05E+C2	1 86E+02	2 23E+01	1 36E+00	5 25E 01	2 19E+00	2 64E+00	2 49E−00	1 63E 01	2 35E+00	2 74E+00	6 05E 01	1 50E+01	1 74E+01	
	010	60	-45 1	7/26/2007	11 25	4 50E1C3	3 39E1 02	2 34E102	3 10E101	2 30E109	5 70E-01	-1 12E109	4 54E100	4 10E 00	1 00E-02	3 45E100	3 94E100	1 95E101	1 86E101	2 02E101	
	011	60	-45 1	10/18/2007	14 38	3 85E+C3	6 53E+C2	3 52E+02	4 74E+01	3 72E+00	7 97E-01	-2 28E+00	4 61E+00	4 30E−00	1 69E−00	4 23E+00	4 96E+00	-3 71E+00	1 36E+01	1 83E+01	
	013	60	-45 1	2/26/2008	13 46	3 74E+C3	7 98E+C2	5 31E+02	5 38E+01	2 36E+00	7 40E-01	7 87E-01	2 69E+00	3 18E−00	2 34E-01	2 34E+00	2 96E+00	4 84E+00	1 86E+01	2 12E+01	
	015	60	-45 1	5/12/2008	15 40	2 80E+C3	2 39E+C2	1 44E+02	3 38E+01	1 85E+00	7 31E-01	7 00E-01	2 24E+00	3 87E−00	1 23E−00	2 13E+00	3 83E+00	7 86E+00	1 26E+01	2 17E+01	
	016	60	-45 1	7/31/2008	17 02	2 71E+C3	2 48E+C2	1 91E+02	3 30E+01	1 59E+00	4 32E-01	2 31E+00	1 82E+00	3 43E−00	6 64E-01	1 45E+00	2 68E+00	3 58E+00	1 40E+01	2 43E+01	
	017	60	-45 1	9/8/2008	16 21	2 08E+C3	4 17E+C2	5 34E+02	3 23E+01	1 66E+00	4 38E-01	-8 81E-01	2 69E+00	3 96E−00	NA	NA	NA	1 22E+01	1 23E+01	2 06E+01	
	018	60	-45 1	11/6/2008	12 38	2 73E+C3	4 17E+C2	1 98E+02	3 20E+01	3 00E+00	7 41E-01	-8 56E-01	5 57E+00	6 56E−00	-2 52E+00	8 95E+00	8 45E+00	-1 63E+00	2 07E+01	2 39E+01	
	019	60	-45 1	1/19/2008	16 29	2 43E+C3	2 49E+C2	1 73E+02	4 39E+01	3 75E+00	8 56E-01	2 50E+00	5 26E+00	2 61E−00	5 13E-01	2 72E+00	3 17E+00	-5 05E-01	1 96E+01	2 29E+01	
	020	60	-45 1	1/22/2009	16 01	2 30E+C3	2 16E+C2	1 48E+02	2 75E+01	2 78E+00	4 70E-01	-1 68E+00	4 20E+00	3 99E−00	-1 97E-01	3 37E+00	3 66E+00	-9 33E+00	1 88E+01	2 23E+01	
	021	60	-45 1	3/18/2009	15 16	3 13E+C3	7 02E+C2	3 88E+02	2 42E+01	2 30E+00	9 13E-01	1 95E-02	5 55E+00	3 83E−00	-9 37E-01	3 55E+00	3 65E+00	1 55E+00	1 70E+01	1 94E+01	
	022	60	-45 1	5/5/2009	16 33	3 45E+C3	4 35E+C2	1 74E+02	2 32E+01	2 33E+00	6 13E 01	4 57E+00	8 56E+00	5 97E−00	6 21E 03	5 87E+00	6 54E+00	1 93E+00	1 85E+01	2 13E+01	
	023	60	-45 1	8/7/2009	16 12	3 00E+C3	2 79E+C2	1 79E+02	2 31E+01	2 34E+00	9 11E-01	2 03E-01	3 35E+00	3 82E−00	7 02E-01	3 31E+00	4 14E+00	-1 36E+01	1 83E+01	2 19E+01	
	024	60	-45 1	10/26/2009	14 49	2 86E+C3	2 82E+C2	1 89E+02	3 30E+01	2 34E+00	5 34E-01	4 1E-01	5 69E+00	6 75E−00	2 55E−00	5 03E+00	7 46E+00	-5 44E+00	1 86E+01	2 17E+01	
	025	60	-45 1	2/15/2010	15 51	2 84E+C3	2 72E+C2	1 74E+02	2 30E+01	3 04E+00	8 16E-01	-6 34E-01	4 68E+00	5 20E−00	-1 03E+00	5 01E+00	5 42E+00	-3 76E+00	1 91E+01	2 21E+01	
	026	60	-45 1	4/30/2010	14 25	2 76E+C3	3 21E+C2	1 58E+02	2 29E+01	3 01E+00	8 31E-01	-1 36E+00	5 64E+00	6 18E−00	3 85E-01	5 33E+00	6 13E+00	-1 14E+01	2 19E+01	2 52E+01	
	027	60	-45 1	8/4/2010	16 38	3 51E+C3	3 33E+C2	1 34E+02	2 55E+01	2 28E+00	4 30E-01	3 52E+00	8 29E+00	9 99E−00	9 22E-01	9 13E+00	1 06E+01	2 07E+00	1 56E+01	1 81E+01	
	028	60	-45 1	11/12/2010	12 30	3 72E+C3	3 30E+C2	1 20E+02	2 33E+01	2 71E+00	9 50E-01	-1 39E+00	6 21E+00	6 79E−00	-1 67E+00	5 95E+00	7 30E+00	3 25E-01	1 86E+01	2 18E+01	
MW-51-40	001	39 7	28	5/30/2007	11 45	1 98E+C2	1 65E+C2	1 58E+02	-5 30E-01	6 73E-0:	9 32E-01	1 04E-01	3 48E+00	3 77E−00	1 61E−00	3 23E+00	3 77E+00	NA	NA	NA	MW-51-40
	002	39 7	28	7/24/2007	15 30	2 23E+C2	1 59E+C2	1 50E+02	7 09E-02	4 71E-0:	5 38E-01	1 65E-02	3 39E+00	3 85E−00	-1 32E+00	4 02E+00	4 13E+00	NA	NA	NA	
	004	39 7	28	11/9/2007	15 40	1 47E+C2	1 55E+C2	1 70E+02	-8 16E-02	3 87E-0:	4 52E-01	1 68E+00	2 66E+00	3 52E−00	-5 71E-02	3 15E+00	3 49E+00	NA	NA	NA	
	005	39 7	28	1/8/2008	10 47	5 86E+C1	1 56E+C2	1 79E+02	1 57E 0:	6 77E 0:	8 82E 01	1 83E 02	2 66E+00	2 93E−00	7 71E 01	2 75E+00	2 87E+00	NA	NA	NA	
	007	39 7	28	5/30/2008	10 27	1 41E1C2	1 01E1C2	1 50E102	3 71E-0:	5 57E-0:	2 57E-01	3 19E-01	2 03E100	3 41E 00	2 12E 00	2 35E100	3 50E100	NA	NA	NA	
	008	39 7	28	8/8/2008	14 40	3 29E+C2	1 60E+C2	2 03E+02	3 74E-0:	4 22E-0:	6 70E-01	1 29E+00	2 19E+00	3 98E−00	-1 99E-01	1 79E+00	2 99E+00	-8 33E+00	1 02E+01	1 83E+01	
	009	39 7	28	10/27/2008	13 11	1 68E+C2	1 85E+C2	1 95E+02	1 84E-02	4 26E-0:	5 97E-01	4 31E-01	4 48E+00	4 88E−00	-1 35E+00	5 33E+00	6 29E+00	-5 03E+00	2 11E+01	2 46E+01	
	010	39 7	28	1/20/2009	14 50	2 37E+C1	1 68E+C2	1 92E+02	1 92E-0:	7 95E-0:	9 70E-01	9 89E-01	2 61E+00	3 26E−00	1 05E−00	2 75E+00	3 30E+00	8 95E+00	1 67E+01	1 87E+01	
	011	39 7	28	5/7/2009	14 27	2 03E+C2	1 76E+C2	1 81E+02	1 02E-0:	6 81E-0:	8 27E-01	1 18E+00	7 68E+00	4 72E−00	-1 14E+00	5 03E+00	5 08E+00	-1 06E+00	1 83E+01	2 11E+01	
	012	39 7	28	8/12/2009	13 42	2 67E+C2	1 70E+C2	1 79E+02	6 39E-02	5 59E-0:	6 39E-01	2 93E-01	3 35E+00	3 41E−00	1 00E−00	3 01E+00	3 56E+00	-5 55E+00	1 95E+01	2 27E+01	
	013	39 7	28	1/18/2009	14 26	1 55E+C2	1 32E+C2	1 41E+02	-2 16E-01	6 35E-0:	8 39E-01	-1 42E+00	5 66E+00	6 00E−00	-1 14E+00	5 43E+00	6 92E+00	-5 68E+00	1 96E+01	2 30E+01	
	014	39 7	28	2/5/2010	14 31	7 54E+C1	1 74E+C2	1 98E+02	-5 43E-02	6 58E-0:	8 54E-01	1 75E+00	4 09E+00	4 72E−00	-2 51E+00	5 31E+00	4 42E+00	NA	NA	NA	
	015	39 7	28	4/8/2010	13 58	9 55E+C1	1 32E+C2	1 44E+02	-1 04E-01	7 30E-0:	8 90E-01	8 94E-01	8 25E+00	9 56E−00	-1 54E+00	9 13E+00	9 55E+00	NA	NA	NA	
	016	39 7	28	9/25/2010	16 29	1 70E+C2	1 07E+C2	1 38E+02	-4 31E-02	3 11E-0:	4 19E-01	-2 48E+00	6 17E+00	6 53E−00	1 45E−00	5 21E+00	6 37E+00	NA	NA	NA	
	017	39 7	28	1/30/2010	12 54	1 40E1C2	1 41E102	1 44E102	1 46E-0:	6 05E-0:	7 12E-01	1 54E100	4 20E100	4 05E 00	1 72E 00	4 17E100	4 95E100	NA	NA	NA	
MW-51-79	001	73 7	-11	5/30/2007	12 42	9 09E1C1	1 55E102	1 72E102	-2 36E-01	6 90E-0:	9 50E-01	2 20E100	3 63E100	3 90E 00	3 52E-01	3 31E100	3 76E100	NA	NA	NA	MW-51-79
	002	78 7	-11	7/24/2007	17 00	4 24E+C1	1 43E+C2	1 57E+02	8 02E-03	5 35E-0:	6 15E-01	-6 37E-0:	3 88E+00	4 21E−00	-2 83E-01	4 51E+00	4 93E+00	NA	NA	NA	
	004	78 7	-11	11/9/2007	16 18	5 00E+C1	1 50E+C2	1 71E+02	-4 97E-02	2 99E-0:	3 52E-01	2 66E+00	2 57E+00	3 56E−00	-2 43E-01	4 02E+00	4 43E+00	NA	NA	NA	
	005	78 7	-11	1/8/2008	10 08	9 26E+C1	1 59E+C2	1 79E+02	-4 64E-01	7 31E-0:	9 74E-01	-7 91E-0:	2 22E+00	2 42E−00	2 58E-01	2 37E+00	2 70E+00	NA	NA	NA	
	007	78 7	-11	5/30/2008	10 55	6 70E+C1	9 41E+C1	1 51E+02	2 46E-02	4 94E-0:	9 34E-01	-1 14E+00	3 43E+00	4 80E−00	-5 13E-01	2 73E+00	4 31E+00	NA	NA	NA	
	008	78 7	-11	8/8/2008	12 55	1 61E+C2	1 31E+C2	2 01E+02	2 03E-0:	2 99E-0:	5 18E-01	9 63E-01	2 17E+00	3 82E−00	5 64E-01	2 33E+00	3 98E+00	-1 07E+01	1 07E+01	1 93E+01	
	009	78 7	-11	10/27/2008	13 30	1 14E+C1	1 62E+C2	1 99E+02	3 14E-03	6 14E-0:	7 35E-01	8 42E-01	5 67E+00	5 75E−00	2 41E−00	5 21E+00	6 37E+00	3 72E+00	1 77E+01	2 02E+01	
	010	78 7	-11	1/20/2009	15 21	1 01E+C2	1 33E+C2	1 48E+02	-1 71E-01	3 15E-0:	5 02E-01	5 93E-01	5 57E+00	3 65E−00	-2 94E-01	3 21E+00	3 56E+00	1 58E+01	1 73E+01	1 96E+01	
	011	78 7	-11	5/7/2009	15 10	6 19E+C1	1 58E+C2	1 81E+02	6 97E-0:	7 58E-0:	8 39E-01	5 17E-01	7 68E+00	5 17E−00	2 33E−00	5 79E+00	6 97E+00	-5 40E+00	1 73E+01	2 00E+01	
	012	78 7	-11	8/12/2009	11 11	1 99E+C2	1 67E+C2	1 80E+02	7 34E 02	4 50E 0:	5 53E 01	4 76E 0:	4 82E+00	4 34E−00	1 34E+00	4 22E+00	4 21E+00	1 73E+01	1 83E+01	2 19E+01	
	013	73 7	-11	1/18/2009	14 31	1 15E1C2	1 06E1C2	2 20E102	-4 50E-02	6 37E-0:	8 44E-01	-8 35E-0:	5 79E100	6 45E 00	2 73E 00	5 53E100	8 07E100	2 96E-31	1 60E101	1 94E101	
	014	78 7	-11	2/5/2010	14 40	1 37E+C2	1 80E+C2	1 99E+02	-1 36E-01	6 10E-0:	8 44E-01	3 61E-02	3 39E+00	3 74E−00	7 57E-01	3 57E+00	4 08E+00	NA	NA	NA	
	015	78 7	-11	4/8/2010	14 21	6 44E+C1	1 53E+C2	1 91E+02	4 88E-0:	8 07E-0:	9 02E-01	4 25E+00	8 69E+00	1 11E−01	4 52E+00	1 03E+01	1 28E+01	NA	NA	NA	
	016	78 7	-11	9/25/2010	16 47	1 10E+C2	9 84E+C1	1 51E+02	5 81E-0:	8 23E-0:	8 92E-01	5 29E+00	6 13E+00	7 76E−00	1 58E−00	5 71E+00	7 88E+00	NA	NA	NA	
	017	78 7	-11	1/30/2010	13 08	3 11E+C1	1 21E+C2	1 44E+02	-1 22E-01	4 32E-0:	5 34E-01	-8 30E-0:	4 13E+00	4 54E−00	9 58E-01	4 02E+00	4 66E+00	NA	NA	NA	
MW-51-104	001	103 7	-36	5/30/2007	11 05	5 71E+C1	1 48E+C2	1 71E+02	-6 74E-02	7 59E-0:	9 90E-01	1 25E+00	3 27E+00	3 35E−00	7 70E-02	3 25E+00	3 62E+00	NA	NA	NA	MW-51-104
	002	103 7	-36	7/24/2007	17 06	9 07E+C1	1 47E+C2	1 54E+02	3 62E-0:	4 86E-0:	5 41E-01	-4 20E+00	4 42E+00	3 92E−00	1 42E−00	4 44E+00	5 33E+00	NA	NA	NA	
	004	103 7	-36	11/9/2007	14 35	5 17E+C1	1 50E+C2	1 70E+02	-2 40E-01	3 18E-0:	3 36E-01	-1 26E+00	2 65E+00	2 92E−00	1 15E−00	2 61E+00	3 18E+00	NA	NA	NA	
	005	103 7	-36	1/8/2008	12 15	-4 84E+00	1 45E+C2	1 78E+02	-6 19E-02	7 22E-0:	9 84E-01	-9 87E-0:	2 09E+00	2 26E−00	-3 84E-01	2 54E+00	2 50E+00	NA	NA	NA	
	006	103 7	-36	8/8/2008	10 50	2 82E+C2	1 55E+C2	2 38E+02	-2 66E-01	4 30E-0:	7 22E-01	1 56E+00	2 03E+00	3 60E−00	-1 21E-01	2 07E+00	3 38E+00	-4 19E+00	1 34E+01	2 36E+01	
	007	103 7	36	10/27/2008	10 07	1 21E+C2	1 39E+C2	1 49E+02	1 19E 0:	4 77E 0:	6 13E 01	5 61E+00	6 51E+00	8 52E−00	5 72E+00	8 93E+00	8 26E+00	1 01E+00	1 87E+01	2 12E+01	
	008	103 7	-36	1/20/2009	10 46	9 93E+C1	1 33E+C2	1 48E+02	9 07E-03	3 78E-0:	5 34E-01	-1 33E+00	2 87E+00	3 03E−00	-1 01E+00	2 37E+00	2 42E+00	-2 09E+00	2 00E+01	2 33E+01	
	009	103 7	-36	5/7/2009	11 48	1 11E+C2	1 61E+C2	1 78E+02	-1 33E-01	6 36E-0:	7 99E-01	-8 75E-0:	3 79E+00	3 86E−00	4 67E-01	3 31E+00	4 01E+00	-1 33E+01	2 36E+01	2 71E+01	
	010	103 7	-36	8/12/2009	11 14	2 91E+C2	1 71E+C2	1 80E+02	1 27E-0:	5 55E-0:	4 36E-01	8 06E-01	6 28E+00	5 82E−00	1 09E-01	5 93E+00	4 36E+00	-2 40E+00	1 86E+01	2 16E+01	
	011	103 7	-36	1/18/2009	11 34	1 44E+C2	1 33E+C2	1 43E+02	5 67E-0:	7 29E-0:	7 97E-01	-9 34E+00	1 07E+01	1 08E−01	-7 59E-01	5 11E+00	6 60E+00	3 03E+00	1 62E+01	1 84E+01	

See Page 32 for Notes

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	
MW-51-104	012	103 7	-36	2/5/2010	11 44	-1 96E+01	1 70E+02	1 99E+02	3 73E-03	6 18E-0:	8 24E-01	3 36E-03	7 17E+00	6 23E-00	1 95E-00	5 33E+00	6 49E+00	NA	NA	NA	MW-51-104
	013	103 7	-36	4/8/2010	10 42	1 10E+C2	1 34E+C2	1 45E+02	1 26E-0:	7 52E-0:	8 99E-01	-5 36E-0:	8 43E+00	9 34E-00	2 15E-00	7 95E+00	9 79E+00	NA	NA	NA	
	014	103 7	-36	8/25/2010	13 18	1 33E+C2	1 37E+C2	1 44E+02	7 62E-0:	8 15E-0:	8 20E-01	8 90E-01	5 75E+00	6 63E-00	-2 70E-01	4 95E+00	5 47E+00	NA	NA	NA	
	015	103 7	-36	1/:30/2C10	9 55	8 54E+C1	1 33E+C2	1 47E+02	3 74E-0:	7 18E-0:	8 12E-01	-1 43E-0:	3 59E+00	4 55E-00	2 19E-01	4 55E+00	5 05E+00	NA	NA	NA	
MW-51-135	001	135 2	-67 5	5/30/2007	13 00	8 24E+C1	1 50E+C2	1 70E+02	-4 68E-01	5 53E-0:	8 40E-01	-4 01E-0:	3 62E+00	4 03E-00	2 55E-00	3 84E+00	4 48E+00	NA	NA	NA	MW-51-135
	002	135 2	-67 5	7/24/2007	17 40	9 51E+C1	1 43E+C2	1 59E+02	5 33E-0:	6 34E-0:	9 76E-01	-4 56E-0:	4 07E+00	4 86E-00	3 42E-01	3 83E+00	3 84E+00	NA	NA	NA	
	004	135 2	-67 5	11/9/2007	11 55	9 83E+C1	1 53E+C2	1 72E+02	2 42E 01	2 54E 0:	3 18E 01	7 27E 0:	3 46E+00	3 70E-00	3 1 4E 01	3 22E+00	3 66E+00	NA	NA	NA	
	005	135 2	-67 5	:/8/2008	13 20	4 21E+C1	1 55E+C2	1 30E+02	3 47E-02	7 34E-0:	8 79E-01	6 20E-02	1 03E+00	2 02E 00	1 43E-02	1 71E+00	1 90E+00	NA	NA	NA	
	006	135 2	-67 5	8/8/2008	11 50	2 09E+C2	1 39E+C2	1 99E+02	3 09E-02	2 40E-0:	4 37E-01	-1 03E+00	2 68E+00	3 29E-00	1 01E-02	2 01E+00	3 34E+00	-5 78E+00	: 14E+01	2 02E+01	
	007	135 2	-67 5	10/27/2008	10 05	7 68E+C1	1 45E+C2	1 99E+02	2 72E-04	5 05E-0:	6 63E-01	-1 74E+00	5 26E+00	6 63E-00	3 92E+00	5 08E+00	6 69E+00	-2 05E-01	. 74E+01	2 01E+01	
	008	135 2	-67 5	1/20/2009	11 02	1 31E+C2	1 35E+C2	1 48E+02	-3 04E-01	3 41E-0:	5 34E-01	-6 92E-0:	3 59E+00	4 31E-00	9 34E-01	3 05E+00	3 66E+00	-1 08E+01	: 76E+01	2 10E+01	
	009	135 2	-67 5	5/7/2009	11 53	2 44E+C1	1 43E+C2	1 71E+02	8 54E-02	4 71E-0:	5 79E-01	3 06E+00	7 04E+00	4 69E-00	-7 33E-01	3 77E+00	4 00E+00	-2 11E+01	2 24E+01	2 60E+01	
	010	135 2	-67 5	8/12/2009	11 22	9 84E+C1	1 61E+C2	1 79E+02	-1 62E-01	4 93E-0:	6 57E-01	-1 17E+00	3 75E+00	3 74E-00	2 69E-00	3 33E+00	4 29E+00	-1 59E+01	: 81E+01	2 17E+01	
	011	135 2	-67 5	1/:18/2C09	11 35	1 30E+C2	1 32E+C2	1 43E+02	-5 62E-01	6 36E-0:	8 17E-01	-1 52E-0:	4 53E+00	5 17E-00	2 08E-00	5 02E+00	6 12E+00	: 08E+00	: 64E+01	1 88E+01	
	012	135 2	-67 5	2/5/2010	11 48	4 89E+C0	1 71E+C2	1 98E+02	7 14E-02	6 50E-0:	8 21E-01	-1 07E-02	3 50E+00	4 35E-00	-4 54E-02	4 51E+00	5 10E+00	NA	NA	NA	
	013	135 2	-67 5	4/8/2010	11 06	5 86E+C1	1 31E+C2	1 50E+02	-2 09E-0:	5 99E-0:	7 35E-01	-7 74E-03	8 73E+00	9 88E-00	-4 95E-01	1 04E+01	1 19E+01	NA	NA	NA	
	014	135 2	-67 5	8/25/2010	13 21	1 36E+C2	1 41E+C2	1 47E+02	-2 33E-01	4 44E-0:	6 70E-01	-6 54E-0:	6 15E+00	6 90E-00	1 74E+00	5 62E+00	7 77E+00	NA	NA	NA	
	015	135 2	-67 5	1/:30/2C10	9 57	9 53E+C1	1 33E+C2	1 45E+02	4 21E 0:	7 13E 0:	7 28E 01	5 11E 0:	4 18E+00	4 61E-00	2 98E 01	4 23E+00	4 58E+00	NA	NA	NA	
MW-51-163	001	162 7	-95	5/30/2007	14 40	1 18E+C2	1 26E+C2	1 59E+02	3 29E-0:	1 16E+00	1 36E+00	-2 81E-0:	3 69E+00	3 43E-00	1 77E-01	2 82E+00	3 20E+00	NA	NA	NA	MW-51-163
	002	162 7	-95	7/24/2007	14 05	4 98E+C1	1 44E+C2	1 56E+02	1 05E-0:	4 58E-0:	5 21E-01	-2 43E-0:	3 44E+00	3 78E-00	8 64E-02	3 25E+00	3 63E+00	NA	NA	NA	
	004	162 7	-95	11/9/2007	13 32	7 30E+C1	1 52E+C2	1 71E+02	2 08E-0:	2 82E-0:	3 12E-01	1 41E-01	3 54E+00	3 51E-00	-1 11E+00	3 01E+00	3 17E+00	NA	NA	NA	
	005	162 7	-95	:/8/2008	13 57	-1 99E+01	1 47E+C2	1 82E+02	4 40E-0:	8 22E-0:	9 29E-01	-1 74E+00	2 66E+00	2 46E-00	8 69E-02	2 15E+00	2 44E+00	NA	NA	NA	
	006	162 7	-95	8/8/2008	11 16	6 92E+C1	8 27E+C1	1 40E+02	-1 22E-01	2 53E-0:	5 44E-01	-1 54E+00	2 25E+00	3 56E-00	3 78E-01	1 97E+00	3 39E+00	4 33E+00	: 26E+01	2 15E+01	
	007	162 7	-95	10/27/2008	10 20	5 58E+C1	1 67E+C2	1 95E+02	2 55E-0:	5 76E-0:	6 57E-01	-1 70E+00	6 18E+00	6 74E-00	5 42E-01	5 33E+00	6 25E+00	2 11E+00	: 88E+01	2 14E+01	
	008	162 7	-95	1/20/2009	11 44	4 60E+C1	1 30E+C2	1 48E+02	-1 98E-01	4 97E-0:	6 88E-01	-9 70E-0:	3 14E+00	3 27E-00	-7 70E-02	3 24E+00	3 54E+00	-1 01E+01	: 80E+01	2 14E+01	
	009	162 7	-95	5/7/2009	12 09	5 68E+C1	1 56E+C2	1 81E+02	-5 45E-02	4 51E-0:	6 13E-01	-7 96E-0:	5 09E+00	3 39E-00	1 08E-00	3 63E+00	3 83E+00	4 10E+00	: 89E+01	2 15E+01	
	010	162 7	-95	8/12/2009	11 28	1 41E+C2	1 62E+C2	1 79E+02	7 74E-02	5 76E-0:	6 99E-01	7 50E-01	3 74E+00	4 26E-00	-7 23E+00	3 23E+00	3 06E+00	-3 79E+00	: 80E+01	2 08E+01	
	011	162 7	-95	1/:18/2C09	11 33	9 48E+C1	1 29E+C2	1 43E+02	6 98E 02	6 54E 0:	7 96E 01	2 63E+00	5 69E+00	6 04E-00	2 61E-00	5 33E+00	6 54E+00	2 21E+00	: 66E+01	1 99E+01	
	012	162 7	-95	2/5/2010	11 46	6 10E+C1	1 74E+C2	1 30E+02	-1 02E-01	5 76E-0:	8 21E-01	-0 20E-0:	8 12E+00	7 94E 00	-1 55E+00	5 03E+00	6 07E+00	NA	NA	NA	
	013	162 7	-95	4/8/2010	11 31	5 35E+C1	1 27E+C2	1 46E+02	-7 65E-02	6 06E-0:	8 13E-01	-2 95E+00	8 55E+00	8 74E-00	-1 20E+00	1 04E+01	1 10E+01	NA	NA	NA	
	014	162 7	-95	8/25/2010	13 21	8 26E+C1	9 75E+C1	1 35E+02	-1 08E-01	5 98E-0:	8 31E-01	5 91E+00	6 72E+00	8 11E-00	8 67E-01	5 32E+00	7 26E+00	NA	NA	NA	
	015	162 7	-95	1/:30/2C10	10 02	9 01E+C1	1 31E+C2	1 44E+02	-3 11E-01	6 98E-0:	9 34E-01	1 23E+00	8 07E+00	4 14E-00	3 30E-01	3 94E+00	4 43E+00	NA	NA	NA	
MW-51-189	001	189 2	-121 5	5/30/2007	14 00	1 87E+C2	1 67E+C2	1 71E+02	-2 88E-02	8 90E-0:	1 11E+00	-3 52E-02	3 58E+00	3 82E-00	4 55E-00	3 57E+00	4 63E+00	NA	NA	NA	MW-51-189
	002	189 2	-121 5	7/24/2007	13 15	9 49E+C1	1 46E+C2	1 53E+02	3 93E-0:	4 38E-0:	4 48E-01	-8 87E-0:	4 11E+00	3 58E-00	1 57E+00	4 02E+00	4 31E+00	NA	NA	NA	
	003	189 2	-121 5	10/2/2007	12 20	8 45E+C0	1 70E+C2	1 96E+02	-5 06E-02	2 16E-0:	2 58E-01	1 18E+01	5 45E+00	2 92E-00	-4 74E-01	2 78E+00	3 04E+00	NA	NA	NA	
	004	189 2	-121 5	11/9/2007	13 05	-6 26E+00	1 48E+C2	1 71E+02	1 93E-0:	3 51E-0:	4 38E-01	3 64E+00	3 27E+00	4 07E-00	-8 07E-02	3 69E+00	4 05E+00	NA	NA	NA	
	005	189 2	-121 5	:/8/2008	13 10	-4 82E+00	1 44E+C2	1 77E+02	-3 17E-02	7 31E-0:	8 92E-01	1 55E+00	2 13E+00	2 49E-00	1 42E+00	1 98E+00	2 41E+00	NA	NA	NA	
	006	189 2	-121 5	8/8/2008	11 17	1 10E+C2	8 97E+C1	1 43E+02	-1 43E-01	3 38E-0:	6 60E-01	-2 27E+00	2 13E+00	3 12E-00	-1 79E+00	2 70E+00	3 57E+00	-5 89E+00	: 15E+01	2 04E+01	
	007	189 2	-121 5	10/27/2008	10 11	7 69E+C1	1 74E+C2	1 99E+02	5 61E-0:	7 16E-0:	7 51E-01	6 11E-01	6 30E+00	7 30E 00	3 04E 00	5 13E+00	7 60E+00	-5 95E+00	: 04E+01	2 17E+01	
	008	189 2	-121 5	1/20/2009	11 33	3 32E+C1	1 30E+C2	1 40E+02	-2 14E-01	3 45E-0:	5 59E-01	-2 05E+00	3 40E+00	3 62E 00	1 91E 00	3 32E+00	4 20E+00	-3 33E+00	: 79E+01	2 11E+01	
	009	189 2	-121 5	5/7/2009	11 55	2 06E+C1	1 52E+C2	1 81E+02	1 44E-0:	5 33E-0:	6 41E-01	1 70E+00	9 39E+00	6 26E-00	-1 22E+00	5 79E+00	6 1 .E+00	-3 36E+00	. 86E+01	2 14E+01	
	010	189 2	-121 5	8/12/2009	11 11	2 75E+C1	1 59E+C2	1 50E+02	7 76E-0:	8 93E-0:	9 41E-01	9 55E-01	3 82E+00	4 47E-00	1 47E-00	3 84E+00	4 60E+00	-1 99E+00	2 14E+01	2 47E+01	
	011	189 2	-121 5	1/:18/2C09	11 31	8 88E+C1	1 35E+C2	1 51E+02	3 60E-0:	5 90E-0:	6 58E-01	2 96E+00	5 58E+00	6 76E-00	-2 88E-01	5 02E+00	6 43E+00	-9 17E+00	: 92E+01	2 26E+01	
	012	189 2	-121 5	2/5/2010	11 35	3 42E+C1	1 73E+C2	1 98E+02	3 21E-0:	6 33E-0:	6 33E-01	1 25E+00	5 70E+00	6 64E-00	-2 35E+00	5 75E+00	6 51E+00	NA	NA	NA	
	013	189 2	-121 5	4/8/2010	11 16	5 35E+C1	1 27E+C2	1 46E+02	3 25E-0:	7 35E-0:	8 47E-01	-2 07E+00	8 19E+00	8 51E-00	3 45E-01	7 32E+00	8 29E+00	NA	NA	NA	
	014	189 2	-121 5	8/25/2010	13 13	5 86E+C1	9 38E+C1	1 34E+02	4 40E-02	5 97E-0:	7 55E-01	2 87E+00	5 64E+00	6 69E-00	-8 01E-01	5 85E+00	6 25E+00	NA	NA	NA	
	015	189 2	-121 5	1/:30/2C10	9 56	6 91E+C1	1 29E+C2	1 46E+02	1 93E-0:	7 99E-0:	9 31E-01	-7 45E-0:	4 51E+00	4 98E-00	-3 16E-01	4 61E+00	5 06E+00	NA	NA	NA	
MW-52-11	001	10	6 8	6/20/2007	17 35	1 47E+C2	1 68E+C2	1 84E+02	-3 50E-01	6 83E-0:	8 83E-01	1 96E+00	2 54E+00	2 99E-00	6 12E-01	2 72E+00	2 65E+00	-4 56E+00	: 26E+01	1 54E+01	MW-52-11
	002	10	6 8	8/6/20C7	16 18	7 71E+C1	1 73E+C2	1 94E+02	5 43E 01	6 12E 0:	9 38E 01	2 16E+00	3 42E+00	3 23E-00	3 39E 02	2 79E+00	3 12E+00	NA	NA	NA	
	003	10	6 8	4/20/2008	13 23	1 13E+C3	1 53E+C2	1 90E+02	1 97E-0:	4 73E-0:	6 46E-01	5 19E-01	1 53E+00	3 6E 00	-2 15E+00	1 52E+00	4 08E+00	NA	NA	NA	
	004	10	6 8	4/30/2009	14 27	5 19E+C2	4 61E+C2	4 72E+02	4 22E-02	5 54E-0:	7 17E-01	2 98E-01	7 22E+00	5 01E-00	1 41E-00	5 07E+00	6 04E+00	NA	NA	NA	
	005	10	6 8	5/1/2010	12 26	5 15E+C2	1 74E+C2	1 83E+02	1 89E-0:	4 77E-0:	5 52E-01	2 14E+00	5 59E+00	6 97E-00	-2 04E+00	5 91E+00	6 08E+00	NA	NA	NA	
MW-52-18	001	17 5	-2 6	5/24/2007	10 44	1 62E+C2	1 52E+C2	1 55E+02	-2 20E-01	4 98E-0:	7 30E-01	6 53E-01	3 19E+00	3 74E-00	3 13E-00	3 33E+00	4 22E+00	-1 09E+00	9 82E+00	1 14E+01	MW-52-18
	002	17 5	-2 6	8/6/20C7	13 45	6 73E+C1	1 74E+C2	1 96E+02	-7 91E-02	6 92E-0:	8 93E-01	-1 43E+00	3 54E+00	3 67E-00	1 11E-01	3 15E+00	3 54E+00	NA	NA	NA	
	004	17 5	-2 6	4/30/2009	16 15	2 29E+C2	2 01E+C2	2 17E+02	-6 52E-02	5 55E-0:	7 37E-01	-1 47E-02	7 69E+00	5 26E-00	8 60E-01	4 42E+00	5 24E+00	NA	NA	NA	
	005	17 5	-2 6	5/5/2010	16 19	3 01E+C2	1 71E+C2	1 83E+02	8 08E-02	4 19E-0:	5 26E-01	1 60E+00	5 61E+00	6 44E-00	9 40E-01	5 42E+00	6 22E+00	NA	NA	NA	
MW-52-48	001	48	-33 1	5/24/2007	11 35	7 02E+C1	1 48E+C2	1 57E+02	-3 61E-01	7 44E-0:	1 01E+00	3 66E-01	2 54E+00	3 39E-00	-9 91E-01	3 03E+00	3 1 .E+00	-2 74E+00	8 16E+00	9 55E+00	MW-52-48
	002	48	-33 1	8/6/20C7	14 00	1 15E+C2	1 76E+C2	1 96E+02	-5 59E-01	4 83E-0:	7 83E-01	7 85E-01	3 54E+00	3 75E-00	4 81E-01	3 29E+00	3 75E+00	NA	NA	NA	
	004	48	-33 1	5/1/20C9	11 35	1 43E+C2	9 84E+C1	1 30E+02	4 55E-02	6 22E-0:	7 22E-01	1 19E+00	7 61E+00	5 07E-00	-2 32E+00	4 41E+00	4 29E+00	NA	NA	NA	
	005	48	33 1	5/5/2010	16 43	1 60E+C2	1 65E+C2	1 82E+02	6 40E 0:	6 58E 0:	6 90E 01	6 17E 0:	6 64E+00	6 70E-00	1 90E 01	5 13E+00	5 67E+00	NA	NA	NA	
MW-52-64	001	64	-49 1	5/24/2007	14 44	3 82E+C0	1 70E+C2	1 98E+02	-3 20E-01	7 58E-0:	9 77E-01	-1 03E+00	3 25E+00	3 43E-00	8 00E-01	3 54E+00	4 1 .E+00	-2 80E+00	9 12E+00	1 07E+01	MW-52-64
	002	64	-49 1	8/6/20C7	15 30	3 72E+C1	1 71E+C2	1 96E+02	-1 70E-02	7 22E-0:	9 23E-01	3 10E-01	3 10E+00	3 68E-00	1 80E-00	3 03E+00	4 12E+00	NA	NA	NA	
	004	64	-49 1	5/1/20C9	13 50	-1 02E+01	8 27E+C1	1 10E+02	4 35E-0:	7 01E-0:	7 72E-01	1 82E+00	6 54E+00	4 56E-00	1 24E-00	4 23E+00	4 80E+00	NA	NA	NA	
	005	64	-49 1	5/5/2010	12 52	7 62E+C1	1 61E+C2	1 81E+02	-2 23E-01	7 02E-0:	9 13E-01	-1 12E+00	5 21E+00	4 96E-00	1 49E-00	4 05E+00	4 98E+00	NA	NA	NA	

J:\17,000-18,999\17869\17869-92.MGQ\4-2010\FINAL\Tables\;
Table 5 - Historic Groundwater Analytical Results.xlsx;
Table5

See Page 32 for Notes

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	
MW-52-118	004	NA	NA	4/30/2009	12:03	1.15E+02	1.00E+02	1.06E+02	-3.34E-01	4.29E-01	6.39E-01	2.00E+00	8.58E+00	5.72E-00	1.27E-00	4.63E+00	5.65E+00	NA	NA	NA	MW-52-118
MW-52-122	001	122	-107.1	5/24/2007	14:55	6.78E+01	1.47E+02	1.56E+02	-4.24E-01	6.52E-01	9.54E-01	2.12E+00	3.59E+00	3.62E-00	-1.76E+00	3.33E+00	3.29E+00	-1.94E+00	9.66E+00	1.13E+01	MW-52-122
	002	122	-107.1	8/6/2007	12:05	4.42E+01	1.71E+02	1.96E+02	-4.19E-01	7.10E-01	9.50E-01	1.99E+00	4.09E+00	4.34E-00	2.10E-01	4.13E+00	4.70E+00	NA	NA	NA	
	003	122	-107.1	4/28/2008	15:23	8.87E+01	8.60E+01	1.44E+02	1.21E-01	2.92E-01	5.22E-01	-1.25E+00	2.05E+00	3.24E-00	2.72E-00	2.33E+00	4.52E+00	NA	NA	NA	
	005	122	-107.1	5/5/2010	14:57	6.46E+01	1.64E+02	1.84E+02	1.59E-01	4.56E-01	5.50E-01	3.04E-02	5.33E+00	6.01E-00	-3.25E+00	5.25E+00	6.14E+00	NA	NA	NA	
MW-52-162	001	161.5	-146.6	5/24/2007	11:55	2.89E+02	1.95E+02	2.38E+02	-5.15E-01	4.87E-01	8.17E-01	-5.89E-01	3.49E+00	3.29E-00	1.59E-00	3.13E+00	3.88E+00	-7.54E-01	9.75E+00	1.13E+01	MW-52-162
	002	161.5	-146.6	8/6/2007	11:30	2.11E+02	1.80E+02	1.95E+02	1.53E-02	4.79E-01	6.53E-01	3.61E-02	3.44E+00	3.77E-00	3.73E-02	3.12E+00	3.52E+00	NA	NA	NA	
	003	161.5	-146.6	4/20/2008	10:22	1.45E+02	8.73E+01	1.43E+02	1.33E+00	3.62E-01	4.43E-01	-9.14E-01	2.03E+00	3.31E-00	2.33E-00	2.13E+00	4.14E+00	NA	NA	NA	
	004	161.5	-146.6	4/30/2009	12:06	4.92E+02	4.58E+02	4.73E+02	-1.49E-01	5.50E-01	7.37E-01	-5.43E-01	8.54E+00	5.69E-00	-1.26E+00	5.03E+00	5.17E+00	NA	NA	NA	
	005	161.5	-146.6	5/5/2010	12:59	2.60E+02	1.70E+02	1.83E+02	-7.86E-02	4.15E-01	5.26E-01	-1.54E+00	5.52E+00	5.96E-00	-3.03E+00	5.63E+00	6.13E+00	NA	NA	NA	
MW-52-181	001	181	-166.1	5/24/2007	12:06	2.48E+02	1.94E+02	2.24E+02	-3.19E-01	5.37E-01	7.58E-01	-5.99E-01	3.30E+00	3.52E-00	-2.81E-01	3.74E+00	4.19E+00	-2.23E-01	1.01E+01	1.17E+01	MW-52-181
	002	181	-166.1	8/6/2007	11:40	1.19E+02	1.77E+02	1.97E+02	5.84E-02	5.56E-01	6.77E-01	-1.21E+00	2.87E+00	2.97E-00	1.28E+00	2.96E+00	3.57E+00	NA	NA	NA	
	003	181	-166.1	4/29/2008	10:24	1.56E+02	8.77E+01	1.44E+02	1.62E-01	2.46E-01	4.28E-01	1.68E+00	2.25E+00	3.96E-00	4.11E-01	2.12E+00	3.63E+00	NA	NA	NA	
	004	181	-166.1	4/30/2009	12:07	1.47E+02	9.95E+01	1.31E+02	-4.95E-02	5.36E-01	7.43E-01	-2.57E+00	5.62E+00	3.88E-00	-1.51E+00	4.17E+00	4.27E+00	NA	NA	NA	
	005	181	-166.1	5/5/2010	12:47	2.18E+02	1.70E+02	1.84E+02	2.80E-01	4.29E-01	4.57E-01	-2.54E-01	5.64E+00	6.37E-00	-2.38E+00	5.42E+00	6.61E+00	NA	NA	NA	
MW-53-82	001	75	-4.7	8/23/2006	12:50	1.18E+04	1.85E+03	5.20E+02	6.58E+01	9.10E+00	2.74E+00	-3.52E+00	7.50E+00	6.64E-00	1.30E-00	1.07E+01	1.16E+01	4.44E+00	9.39E+00	1.02E+01	MW-53-82
	001	75	-4.7	8/23/2006	12:50	1.32E+04	1.11E+03	6.12E+02	NA	NA	NA	9.35E-01	5.58E+00	6.37E-00	1.35E-00	5.73E+00	6.30E+00	NA	NA	NA	
	002	75	-4.7	11/9/2006	11:15	4.54E+02	1.38E+02	1.10E+02	8.00E-02	8.10E-01	9.30E-01	1.20E+00	3.00E+00	3.60E-00	1.30E+00	3.33E+00	4.00E+00	1.36E+00	4.26E+00	4.66E+00	
	003	75	-4.7	6/22/2007	15:30	8.68E+03	1.02E+03	4.31E+02	3.38E+00	1.45E+00	1.04E+00	3.61E+00	3.78E+00	4.53E-00	1.95E-00	3.62E+00	4.63E+00	4.52E+00	1.54E+01	1.77E+01	
	004	75	-4.7	8/9/2007	11:31	7.76E+02	2.06E+02	2.24E+02	-3.41E-02	6.87E-01	8.32E-01	6.29E-01	2.33E+00	2.76E-00	-1.05E+00	2.17E+00	2.17E+00	-2.21E+00	1.99E+01	2.36E+01	
	005	75	-4.7	10/24/2007	13:53	1.11E+03	4.71E+02	4.33E+02	2.35E-01	5.11E-01	5.43E-01	3.07E-01	2.71E+00	3.05E-00	-1.06E+00	2.44E+00	2.58E+00	-1.59E+00	2.09E+01	2.41E+01	
	006	75	-4.7	1/21/2008	12:52	9.42E+02	1.86E+02	1.71E+02	2.19E-01	4.28E-01	4.37E-01	0.00E+00	5.42E+00	3.23E-00	-1.36E+00	2.84E+00	2.84E+00	3.84E+00	1.85E+01	2.11E+01	
	008	75	-4.7	8/4/2008	12:25	1.21E+03	1.84E+02	1.91E+02	6.95E-01	3.34E-01	3.94E-01	2.79E+00	2.26E+00	4.16E-00	2.55E-02	2.14E+00	3.58E+00	1.15E+01	1.24E+01	2.09E+01	
	009	75	-4.7	10/30/2008	15:52	7.94E+02	2.37E+02	1.55E+02	-4.79E-02	2.99E-01	4.19E-01	3.66E+00	6.21E+00	7.56E-00	-1.78E+00	5.33E+00	6.63E+00	-4.83E+00	1.65E+01	1.92E+01	
	010	75	-4.7	1/26/2009	12:00	4.26E+03	3.06E+02	1.92E+02	2.30E+00	1.07E+00	9.76E-01	1.10E+00	3.56E+00	4.51E-00	-2.25E-01	3.52E+00	3.88E+00	8.04E+00	1.64E+01	1.84E+01	
	011	75	-4.7	4/14/2009	14:58	1.75E+03	3.14E+02	1.36E+02	-3.03E-01	7.29E-01	8.87E-01	7.76E+00	6.60E+00	4.40E-00	1.28E-01	4.34E+00	4.84E+00	-1.09E+00	1.85E+01	2.16E+01	
	012	75	-4.7	7/21/2009	16:26	9.85E+02	2.67E+02	2.34E+02	1.47E-01	8.37E-01	9.31E-01	3.51E+00	3.57E+00	4.87E-00	3.14E-00	4.33E+00	5.53E+00	-9.99E-01	1.81E+01	2.07E+01	
	013	75	-4.7	10/27/2009	12:01	6.64E+02	1.95E+02	1.87E+02	1.09E-01	3.36E-01	4.26E-01	1.31E+00	2.50E+00	3.49E-00	2.42E-00	1.13E+00	4.89E+00	9.46E+00	1.79E+01	2.10E+01	
	014	75	-4.7	2/16/2010	12:04	7.14E+03	3.41E+02	1.53E+02	2.23E+00	9.77E-01	7.74E-01	0.00E+00	5.43E+00	7.23E-00	-9.90E-01	4.75E+00	4.91E+00	-1.24E+01	1.76E+01	2.02E+01	
	015	75	-4.7	4/15/2010	15:14	4.71E+03	6.56E+02	3.96E+02	4.06E-01	7.37E-01	8.29E-01	4.40E+00	1.27E+01	1.51E-01	-4.55E+00	1.13E+01	1.13E+01	1.39E+00	1.89E+01	2.19E+01	
	016	75	-4.7	7/30/2010	12:32	2.25E+03	2.66E+02	1.27E+02	3.34E-01	5.83E-01	4.30E-01	-3.03E+00	8.26E+00	8.46E-00	-1.50E+00	8.03E+00	8.03E+00	-1.40E+01	1.71E+01	2.23E+01	
	017	75	-4.7	10/25/2010	12:07	2.59E+03	2.79E+02	1.10E+02	8.07E-01	7.90E-01	8.26E-01	-3.74E-02	5.52E+00	6.57E-00	1.14E-01	5.23E+00	7.00E+00	NA	NA	NA	
MW-53-120	001	109.8	-39.5	8/30/2006	11:30	4.42E+03	1.25E+03	1.12E+03	NA	NA	NA	-6.13E+00	9.49E+00	9.40E-00	4.58E-01	8.95E+00	9.83E+00	NA	NA	NA	MW-53-120
	002	109.8	-39.5	11/9/2006	11:20	7.90E+03	1.47E+03	1.30E+03	2.47E+01	1.33E+00	7.30E-01	-4.50E-01	2.70E+00	3.10E-00	-3.50E-01	2.75E+00	3.30E+00	2.71E+01	1.32E+01	1.36E+01	
	003	109.8	-39.5	6/22/2007	14:22	9.61E+03	1.10E+03	4.32E+02	3.57E+01	3.69E+00	1.04E+00	7.93E+00	5.09E+00	2.84E-00	9.47E-01	3.15E+00	3.72E+00	1.73E+01	1.36E+01	1.47E+01	
	004	109.8	-39.5	8/9/2007	12:45	8.05E+03	1.02E+03	4.59E+02	3.70E+01	3.18E+00	9.24E-01	1.37E+00	3.62E+00	4.27E-00	-1.59E-01	3.74E+00	4.17E+00	1.95E+01	2.14E+01	2.35E+01	
	005	109.8	-39.5	10/24/2007	13:38	7.40E+03	9.29E+02	4.22E+02	3.31E+01	2.27E+00	4.32E-01	-5.34E-01	3.51E+00	3.29E-00	-2.23E-01	3.35E+00	3.72E+00	7.06E+00	2.10E+01	2.38E+01	
	006	109.8	-39.5	1/21/2008	10:43	7.48E+03	3.48E+02	1.72E+02	3.12E+01	2.40E+00	6.46E-01	1.38E+00	3.02E+00	3.18E-00	1.14E-01	3.33E+00	3.71E+00	1.71E+01	1.85E+01	2.02E+01	
	008	109.8	-39.5	5/13/2008	10:10	5.91E+03	3.30E+02	1.43E+02	3.11E+01	1.73E+00	6.73E-01	-1.30E+00	1.50E+00	3.10E-00	1.33E-00	2.15E+00	3.29E+00	2.22E+01	1.20E+01	2.00E+01	
	009	109.8	-39.5	9/4/2008	10:15	5.00E+03	3.46E+02	1.91E+02	3.33E+01	1.52E+00	3.11E-01	-9.74E-01	1.53E+00	3.02E-00	-1.15E-01	2.33E+00	3.20E+00	2.65E+01	1.30E+01	2.11E+01	
	010	109.8	-39.5	9/5/2008	10:55	5.76E+03	5.90E+02	5.27E+02	3.10E+01	1.59E+00	4.10E-01	-3.34E-01	2.41E+00	3.94E-00	NA	NA	NA	1.96E+01	1.19E+01	3.86E-01	
	011	109.8	-39.5	10/30/2008	13:00	5.51E+03	5.59E+02	1.56E+02	2.53E+01	2.04E+00	3.30E-01	2.15E+00	4.05E+00	5.74E-00	0.00E-00	9.18E+00	9.26E+00	5.85E+00	1.69E+01	1.93E+01	
	012	109.8	-39.5	1/15/2009	10:31	5.04E+03	3.23E+02	1.72E+02	4.25E+01	3.63E+00	6.74E-01	3.25E-01	4.72E+00	5.28E-00	-1.96E-02	4.02E+00	4.49E+00	2.12E+01	2.02E+01	2.21E+01	
	013	109.8	-39.5	1/26/2009	12:43	5.06E+03	3.26E+02	1.92E+02	2.54E+01	2.37E+00	7.50E-01	-3.50E-01	4.53E+00	5.10E-00	2.32E-00	4.34E+00	5.39E+00	1.27E+01	2.22E+01	2.48E+01	
	014	109.8	-39.5	3/16/2009	9:40	5.07E+03	8.51E+02	3.81E+02	2.37E+01	2.07E+00	7.32E-01	-9.24E-02	2.48E+00	1.65E-00	-7.85E-01	1.85E+00	1.58E+00	1.34E+01	1.73E+01	1.91E+01	
	015	109.8	-39.5	4/14/2009	13:08	5.65E+03	5.40E+02	1.36E+02	2.26E+01	2.19E+00	5.56E-01	-2.26E+00	6.15E+00	4.10E-00	-6.33E-01	3.85E+00	4.10E+00	8.66E+00	1.83E+01	2.07E+01	
	016	109.8	-39.5	7/21/2009	13:18	5.40E+03	5.18E+02	2.27E+02	4.00E-01	5.46E-01	5.93E-01	-1.68E+00	3.42E+00	3.59E-00	3.12E-00	3.85E+00	5.03E+00	4.59E+00	1.66E+01	1.88E+01	
	017	109.8	-39.5	10/27/2009	11:57	5.05E+03	3.47E+02	1.88E+02	3.10E+01	2.44E+00	7.18E-01	-1.77E-01	5.50E+00	6.55E-00	-2.13E+00	5.67E+00	7.01E+00	6.81E+00	1.86E+01	2.10E+01	
	018	109.8	-39.5	2/16/2010	11:51	4.66E+03	2.87E+02	1.53E+02	3.34E+01	3.39E+00	7.11E-01	4.30E-01	5.62E+00	6.54E-00	3.20E-01	5.23E+00	6.98E+00	6.73E+00	1.91E+01	2.16E+01	
	019	109.8	-39.5	4/15/2010	14:36	4.10E+03	6.14E+02	3.36E+02	3.32E+01	2.29E+00	9.36E-01	-6.92E+00	9.73E+00	9.19E-00	2.24E-01	8.74E+00	9.97E+00	7.52E+00	1.96E+01	2.22E+01	
	020	109.8	-39.5	7/30/2010	14:36	3.81E+03	3.38E+02	1.28E+02	2.97E+01	2.22E+00	4.77E-01	2.09E+00	1.27E+01	1.37E-01	-4.76E-01	8.04E+00	8.95E+00	3.59E+00	1.91E+01	2.21E+01	
	021	109.8	-39.5	10/27/2010	12:48	3.91E+03	3.88E+02	1.11E+02	2.26E+01	2.91E+00	7.32E-01	2.22E+00	5.07E+00	6.00E-00	-9.52E-01	5.43E+00	5.76E+00	NA	NA	NA	
MW-54-37	001	35.5	-23.4	5/3/2007	16:19	8.01E+02	3.14E+02	3.22E+02	1.25E+01	2.12E+00	7.34E-01	2.44E+00	3.63E+00	4.42E-00	-1.43E+00	2.71E+00	2.51E+00	6.09E+00	1.96E+01	2.27E+01	MW-54-37
	002	35.5	-23.4	7/31/2007	10:30	8.88E+02	4.14E+02	2.58E+02	5.30E+00	1.11E+00	6.36E-01	1.46E+00	2.54E+00	3.03E-00	-2.64E-02	2.82E+00	3.13E+00	-4.74E+00	1.83E+01	2.14E+01	
	003	35.5	-23.4	10/19/2007	13:25	1.04E+03	4.26E+02	3.56E+02	6.19E+00	1.37E+00	6.14E-01	6.04E-01	3.30E+00	3.84E-00	6.61E-01	3.54E+00	4.19E+00	1.04E+01	1.59E+01	1.77E+01	
	004	35.5	-23.4	1/15/2008	13:18	1.07E+03	4.97E+02	4.18E+02	5.79E+00	1.47E+00	7.26E-01	7.48E-02	2.81E+00	3.11E-00	1.03E-00	2.79E+00	3.00E+00	-1.88E-01	2.06E+01	2.43E+01	
	005	35.5	-23.4	5/2/2008	13:59	8.70E+02	1.47E+02	1.43E+02	5.38E+00	7.44E-01	5.59E-01	-9.28E-01	2.12E+00	3.29E-00	-8.38E-01	2.55E+00	4.06E+00	3.37E+00	1.24E+01	2.12E+01	
	006	35.5	-23.4	7/22/2008	17:00	9.40E+02	1.08E+02	1.31E+02	6.70E+00	7.50E-01	4.53E-01	1.54E+00	2.22E+00	3.94E-00	-4.43E-01	2.09E+00	3.84E+00	1.42E+00	1.68E+01	2.95E+01	
	007	35.5	-23.4	11/11/2008	13:16	1.25E+03	2.07E+02	1.73E+02	7.33E+00	1.45E+00	5.76E-01	-2.50E+00	6.27E+00	6.87E-00	2.91E-00	5.14E+00	6.50E+00	2.49E+00	1.92E+01	2.21E+01	
	008	35.5	-23.4	2/3/2009	15:34	1.16E+03	1.86E+02	1.54E+02	5.33E+00	1.16E+00	6.56E-01	1.70E+00	3.33E+00	3.92E-00	1.15E+00	3.21E+00	3.14E+00	3.14E+00	2.16E+01	2.50E+01	
	009	35.5	-23.4	5/6/2009	11:51	1.24E+03	2.78E+02	1.81E+02	6.35E+00	1.20E+00	4.75E-01	-1.81E-02	4.22E+00	2.81E-00	-1.16E+00	2.73E+00	2.61E+00	4.37E+00	1.91E+01	2.16E+01	
	010	35.5	-23.4	8/4/2009	14:35	1.42E+03	3.26E+02	2.37E+02	5.33E+00	1.18E+00	6.38E-01	-3.76E-01	3.54E+00	4.29E-00	8.61E-01	4.42E+00	4.53E+00	5.86E+00	2.11E+01	2.41E+01	
	011	35.5	-23.4	11/11/2009	14:35	1.60E+03	2.99E+02	2.30E+02	5.71E+00	1.09E+00	4.56E-01	-6.22E-01	5.64E+00	6.28E-00	-2.24E+00	5.13E+00	6.31E+00	1.36E+01	1.80E+01	1.99E+01	
	012	35.5	-23.4	2/11/2010	11:16	1.31E+03	1.89E+02	1.53E+02	5.17E+00	1.43E+00	7.17E-01	-8.12E-01	5.16E+00	5.56E-00	-1.65E+00	5.73E+00	5.93E+00	-5.60E-01	1.86E+01	2.15E+01	

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	
MW-54-37	013	35 5	-23 4	5/3/2010	14 09	1 18E+C3	2 25E+C2	1 38E+02	4 71E+00	1 56E+00	6 57E-01	-3 67E+00	8 43E+00	8 56E-00	1 69E-00	9 42E+00	1 14E+01	3 61E+00	2 07E+01	2 36E+01	MW-54-37
	014	35 5	-23 4	8/4/2010	14 32	1 21E+C3	2 10E+C2	1 30E+02	4 30E+00	8 37E-0:	3 32E-01	-4 96E-0:	7 38E+00	8 14E-00	-3 57E+0C	9 63E+00	9 58E+00	-3 50E+00	: 50E+01	1 80E+01	
	015	35 5	-23 4	1'/23/2C10	14 47	1 45E+C3	2 27E+C2	1 26E+02	4 51E+00	1 42E+00	9 34E-01	-2 09E+00	5 46E+00	5 80E-00	-6 89E-01	5 35E+00	6 93E+00	-2 56E+00	: 81E+01	2 15E+01	
MW-54-58	001	57 5	-44 4	5/3/2C07	16 45	7 60E+C2	3 11E+C2	3 32E+02	2 22E+00	9 99E-0:	7 32E-01	-3 77E-0:	2 81E+00	3 07E-00	1 15E-01	2 71E+00	3 09E+00	7 50E+00	: 88E+01	2 12E+01	MW-54-58
	002	57 5	-44 4	7/31/2007	9 55	6 93E+C2	3 72E+C2	2 52E+02	1 76E+00	8 53E-0:	7 52E-01	-1 32E+00	3 12E+00	3 23E-00	8 17E-03	3 01E+00	3 35E+00	1 97E-31	: 80E+01	2 08E+01	
	003	57 5	-44 4	10/19/2C07	13 35	5 61E+C2	2 00E+C2	1 34E+02	4 38E-0:	8 43E-0:	9 56E-01	-2 38E-0:	3 43E+00	3 40E-00	3 56E-01	2 95E+00	3 39E+00	2 09E+00	: 59E+01	1 81E+01	
	004	57 5	-44 4	1'/15/2008	13 45	6 47E+C2	4 40E+C2	4 10E+02	2 32E+00	1 09E+00	8 13E 01	2 16E+00	4 59E+00	3 18E-00	7 54E 01	3 05E+00	3 27E+00	4 41E+00	2 34E+01	2 71E+01	
	005	57 5	-44 4	5/2/20C8	14 15	7 33E+C2	1 39E+C2	1 43E+02	1 59E+00	4 27E-0:	5 77E-01	8 65E-01	2 13E+00	3 75E 00	1 63E 00	2 45E+00	4 54E+00	2 78E-31	: 27E+01	2 20E+01	
	006	57 5	-44 4	7/22/2008	17 05	5 78E+C2	9 64E+C1	1 31E+02	1 71E+00	5 24E-0:	6 47E-01	3 78E-01	2 67E+00	3 59E-00	-1 41E-01	2 67E+00	4 23E+00	: 37E+01	: 69E+01	2 85E+01	
	007	57 5	-44 4	1'/11/2C08	13 02	6 95E+C2	1 85E+C2	1 74E+02	9 32E+00	3 62E+00	1 62E+00	-7 43E-0:	3 71E+00	3 89E-00	-1 72E+0C	3 03E+00	3 53E+00	3 01E+00	: 91E+01	2 13E+01	
	008	57 5	-44 4	2/3/20C9	14 53	6 82E+C2	1 71E+C2	1 56E+02	1 38E+00	8 52E-0:	7 24E-01	9 58E-01	2 78E+00	3 29E-00	4 22E-01	2 94E+00	3 39E+00	-3 05E+00	: 95E+01	2 27E+01	
	009	57 5	-44 4	5/6/20C9	12 13	6 58E+C2	2 24E+C2	1 78E+02	2 30E+00	8 50E-0:	6 34E-01	2 19E+00	6 09E+00	4 06E-00	-2 50E+0C	3 63E+00	3 32E+00	-1 92E+01	2 15E+01	2 50E+01	
	010	57 5	-44 4	8/4/20C9	14 30	7 81E+C2	2 73E+C2	2 34E+02	1 41E+00	8 34E-0:	7 44E-01	-1 71E+00	3 25E+00	3 37E-00	-9 96E-01	3 62E+00	3 83E+00	3 34E-31	2 26E+01	2 60E+01	
	011	57 5	-44 4	1'/13/2C09	14 54	8 38E+C2	2 48E+C2	2 33E+02	1 91E+00	7 52E-0:	6 33E-01	3 54E+00	5 67E+00	6 89E-00	-1 36E+0C	5 22E+00	5 52E+00	7 05E+00	: 83E+01	2 07E+01	
	012	57 5	-44 4	2/11/2010	11 48	9 04E+C2	1 74E+C2	1 53E+02	1 38E+00	8 76E-0:	7 99E-01	3 86E-01	5 50E+00	6 29E-00	1 08E-00	7 15E+00	7 82E+00	-1 32E+01	: 88E+01	2 23E+01	
	013	57 5	-44 4	5/3/2010	14 23	1 11E+C3	2 25E+C2	1 42E+02	1 44E+00	8 33E-0:	6 31E-01	6 00E-01	1 10E+01	1 10E-01	-4 85E-01	8 45E+00	9 38E+00	6 55E+00	: 99E+01	2 26E+01	
	014	57 5	-44 4	8/4/2010	14 35	7 67E+C2	1 79E+C2	1 28E+02	1 36E+00	6 80E-0:	6 20E-01	-3 95E+00	9 51E+00	9 85E-00	8 15E-01	1 14E+01	1 32E+01	-5 38E-01	: 44E+01	1 76E+01	
	015	57 5	-44 4	1'/23/2C10	14 55	8 21E+C2	1 80E+C2	1 33E+02	2 57E+00	1 13E+00	9 76E 01	3 83E+00	6 50E+00	7 88E-00	2 75E-00	6 57E+00	8 00E+00	3 91E+00	: 86E+01	2 21E+01	
MW-54-123	001	123	-109 9	5/3/2C07	14 18	1 11E+C3	3 72E+C2	3 36E+02	2 19E+01	2 71E+00	8 30E-01	4 21E+00	3 20E+00	3 67E-00	-2 62E+0C	7 07E+00	3 31E+00	7 42E+00	: 79E+01	2 03E+01	MW-54-123
	002	123	-109 9	7/31/2007	11 10	9 63E+C2	4 29E+C2	3 59E+02	1 35E+01	1 47E+00	8 37E-01	0 00E+00	4 68E+00	4 49E-00	2 95E-00	4 02E+00	5 06E+00	-3 63E+00	: 86E+01	2 17E+01	
	003	123	-109 9	10/19/2C07	12 09	7 01E+C2	3 87E+C2	3 52E+02	1 16E+01	1 88E+00	8 15E-01	4 02E-02	5 51E+00	5 88E-00	-1 72E+0C	5 62E+00	5 68E+00	-4 51E-01	2 19E+01	2 51E+01	
	004	123	-109 9	1'/15/2008	10 52	5 33E+C2	4 23E+C2	4 18E+02	9 56E+00	1 92E+00	7 51E-01	8 25E-01	3 48E+00	3 94E-00	4 41E-01	3 03E+00	3 42E+00	6 86E+00	2 25E+01	2 58E+01	
	005	123	-109 9	5/2/20C8	10 06	6 98E+C2	1 34E+C2	1 39E+02	6 45E+00	8 46E-0:	5 98E-01	-1 28E+00	2 22E+00	3 42E-00	4 12E-00	2 63E+00	5 24E+00	-3 04E+00	: 19E+01	2 08E+01	
	006	123	-109 9	7/22/2008	15 30	6 12E+C2	9 77E+C1	1 32E+02	6 52E+00	8 15E-0:	5 56E-01	-2 82E-0:	2 22E+00	3 72E-00	-2 53E+0C	2 52E+00	3 55E+00	4 33E+00	: 57E+01	2 73E+01	
	007	123	-109 9	1'/11/2C08	11 03	5 80E+C2	1 77E+C2	1 71E+02	1 26E+01	2 10E+00	7 26E-01	-6 72E-0:	5 14E+00	5 51E-00	2 63E-00	4 22E+00	5 62E+00	-4 63E+00	: 85E+01	2 15E+01	
	008	123	-109 9	2/3/20C9	11 55	5 31E+C2	1 64E+C2	1 54E+02	5 21E+00	1 15E+00	5 70E-01	9 03E-01	3 03E+00	3 59E-00	5 33E-02	3 02E+00	3 52E+00	9 09E-31	2 00E+01	2 30E+01	
	009	123	-109 9	5/6/20C9	12 40	6 94E+C2	2 28E+C2	1 78E+02	3 34E+00	1 00E+00	5 36E-01	-1 73E+00	5 54E+00	3 96E-00	2 06E-00	3 13E+00	3 94E+00	7 67E-31	: 86E+01	2 13E+01	
	010	123	109 9	8/4/20C9	14 10	6 29E+C2	2 63E+C2	2 38E+02	1 53E+00	1 24E+00	7 76E 01	6 20E 01	3 50E+00	4 06E-00	2 36E 01	3 27E+00	3 76E+00	: 79E+00	2 11E+01	2 41E+01	
	011	123	-109 9	1'/13/2C09	14 59	7 40E+C2	2 40E+C2	2 24E+02	3 77E+00	1 13E+00	8 70E-01	1 12E-01	1 25E+01	7 40E 00	6 15E 00	2 53E+00	7 53E+00	-1 31E+01	2 10E+01	2 55E+01	
	012	123	-109 9	2/11/2010	11 32	8 57E+C2	1 71E+C2	1 53E+02	3 40E+00	1 13E+00	7 54E-01	1 87E+00	5 45E+00	6 32E-00	8 61E-01	5 33E+00	6 09E+00	-3 72E+00	: 77E+01	2 06E+01	
	013	123	-109 9	5/3/2010	15 08	9 16E+C2	2 04E+C2	1 57E+02	2 25E+00	1 12E+00	8 35E-01	-3 24E+00	8 08E+00	8 03E-00	-5 74E-01	7 62E+00	1 09E+01	-5 51E+00	: 96E+01	2 25E+01	
	014	123	-109 9	8/4/2010	14 49	7 83E+C2	1 80E+C2	1 28E+02	2 98E+00	7 55E-0:	4 15E-01	1 53E+00	9 59E+00	1 16E-01	-9 37E-01	8 21E+00	8 72E+00	-5 12E+00	: 64E+01	1 97E+01	
	015	123	-109 9	1'/23/2C10	15 12	8 12E+C2	1 80E+C2	1 22E+02	7 55E+00	1 46E+00	9 15E-01	2 19E+00	6 74E+00	7 78E-00	-1 25E+0C	5 13E+00	6 62E+00	9 26E+00	: 91E+01	2 15E+01	
MW-54-144	001	144	-130 9	5/3/2C07	14 31	1 34E+C3	5 64E+C2	4 58E+02	1 51E+01	2 42E+00	6 37E-01	-1 34E+00	3 42E+00	3 78E-00	5 23E-01	3 35E+00	3 84E+00	4 62E+00	: 60E+01	1 93E+01	MW-54-144
	002	144	-130 9	7/31/2007	13 33	1 89E+C3	5 67E+C2	2 56E+02	1 22E+01	1 98E+00	6 71E-01	-1 19E+00	2 50E+00	3 03E-00	5 02E-02	3 33E+00	3 77E+00	-5 13E+00	: 89E+01	2 23E+01	
	003	144	-130 9	10/19/2C07	12 12	1 54E+C3	4 73E+C2	3 52E+02	1 58E+01	2 15E+00	7 59E-01	8 53E-01	2 65E+00	3 35E-00	-4 41E-01	3 13E+00	3 39E+00	4 35E-31	: 54E+01	1 78E+01	
	004	144	-130 9	1'/15/2008	11 22	1 40E+C3	5 34E+C2	4 16E+02	1 53E+01	2 34E+00	8 48E-01	3 67E+00	5 04E+00	4 39E-00	4 86E-02	3 95E+00	4 34E+00	9 81E+00	2 24E+01	2 54E+01	
	005	144	-130 9	5/2/20C8	10 20	1 15E+C3	1 64E+C2	1 43E+02	1 59E+01	1 31E+00	7 35E-01	-9 53E-0:	2 26E+00	3 61E-00	-1 66E+0C	2 37E+00	3 65E+00	-2 00E+00	: 21E+01	2 11E+01	
	006	144	-130 9	7/22/2008	15 35	1 13E+C3	1 13E+C2	1 31E+02	1 52E+01	1 23E+00	5 31E-01	1 57E+00	1 51E+00	3 40E 00	-4 90E-01	2 43E+00	3 49E+00	: 11E+01	: 69E+01	2 07E+01	
	007	144	-130 9	1'/11/2C08	11 06	1 14E+C3	2 03E+C2	1 72E+02	2 32E+01	2 37E+00	4 59E-01	-6 63E-0:	3 50E+00	4 30E 00	5 67E-01	5 17E+00	5 90E+00	4 00E+00	2 09E+01	2 39E+01	
	008	144	-130 9	2/3/20C9	12 41	1 13E+C3	2 03E+C2	1 77E+02	1 44E+01	1 76E+00	6 51E-01	-5 38E-03	3 15E+00	3 46E-00	-2 00E-02	2 91E+00	3 20E+00	2 21E+00	2 37E+01	2 76E+01	
	009	144	-130 9	5/6/20C9	10 23	1 42E+C3	2 91E+C2	1 78E+02	1 46E+01	1 39E+00	5 35E-01	-1 92E+00	4 57E+00	5 51E-00	9 27E-01	4 53E+00	4 90E+00	-5 83E+00	: 91E+01	2 21E+01	
	010	144	-130 9	8/4/20C9	11 10	1 29E+C3	3 18E+C2	2 39E+02	1 43E+01	1 74E+00	7 22E-01	6 70E-01	2 51E+00	3 33E-00	-1 51E+0C	3 72E+00	3 66E+00	: 41E+01	2 24E+01	2 50E+01	
	011	144	-130 9	1'/13/2C09	12 13	1 40E+C3	2 88E+C2	2 33E+02	1 51E+01	1 33E+00	7 72E-01	-1 68E+00	4 38E+00	4 54E-00	-1 71E+0C	3 12E+00	2 42E+00	-5 64E+00	: 92E+01	2 24E+01	
	012	144	-130 9	2/10/2010	10 37	1 20E+C3	1 85E+C2	1 53E+02	1 44E+01	2 07E+00	7 30E-01	-5 32E-0:	9 22E+00	1 01E-01	-1 77E+0C	7 62E+00	7 26E+00	-1 11E+01	: 86E+01	2 23E+01	
	013	144	-130 9	5/3/2010	11 41	1 28E+C3	2 40E+C2	1 45E+02	1 37E+01	2 04E+00	6 93E-01	-3 08E+00	7 11E+00	7 03E-00	-4 60E+0C	8 03E+00	6 97E+00	-5 93E+00	2 11E+01	2 46E+01	
	014	144	-130 9	8/4/2010	11 44	1 44E+C3	2 28E+C2	1 33E+02	1 17E+01	1 42E+00	4 70E-01	8 96E+00	1 13E+01	1 44E-01	1 72E-00	8 72E+00	1 06E+01	: 78E+00	: 89E+01	2 21E+01	
	015	144	-130 9	1'/23/2C10	12 30	1 34E+C3	2 15E+C2	1 21E+02	1 38E+01	1 36E+00	5 83E-01	1 02E+00	7 52E+00	8 59E-00	-3 67E+0C	5 43E+00	5 93E+00	2 30E+00	: 91E+01	2 21E+01	
MW 54 173	001	172 5	-159 4	5/3/2C07	14 43	1 90E+C3	6 27E+C2	4 71E+02	2 39E+01	2 64E+00	8 31E 01	4 52E 0:	3 62E+00	4 16E-00	1 92E-00	3 45E+00	1 27E+00	5 00E+00	: 94E+01	2 21E+01	MW 54 173
	002	172 5	-159 4	7/31/2007	13 40	2 00E+C3	5 94E+C2	2 50E+02	1 45E+01	1 95E+00	8 29E-01	7 90E-01	2 63E+00	3 10E 00	7 75E-01	2 22E+00	2 74E+00	3 92E+00	: 01E+01	2 07E+01	
	003	172 5	-159 4	10/19/2C07	12 14	1 91E+C3	5 07E+C2	3 53E+02	1 49E+01	2 07E+00	6 21E-01	1 05E+00	3 29E+00	3 79E-00	-3 08E-01	2 87E+00	3 18E+00	: 37E+00	: 49E+01	1 76E+01	
	004	172 5	-159 4	1'/15/2008	11 15	1 84E+C3	5 84E+C2	4 16E+02	1 41E+01	1 80E+00	9 29E-01	-3 58E-0:	2 81E+00	3 08E-00	-2 21E-01	3 02E+00	3 49E+00	4 75E+00	2 30E+01	2 65E+01	
	005	172 5	-159 4	5/2/20C8	10 35	2 11E+C3	2 10E+C2	1 42E+02	1 22E+01	1 18E+00	9 36E-01	-6 44E-0:	2 22E+00	3 66E-00	1 71E-00	2 13E+00	4 01E+00	4 47E+00	: 23E+01	2 10E+01	
	006	172 5	-159 4	7/22/2008	15 51	2 05E+C3	1 35E+C2	1 30E+02	1 29E+01	1 08E+00	5 25E-01	-6 92E-02	2 07E+00	3 52E-00	-1 62E+0C	2 11E+00	3 15E+00	7 86E+00	: 59E+01	2 72E+01	
	007	172 5	-159 4	1'/11/2C08	11 07	1 66E+C3	2 24E+C2	1 75E+02	1 51E+01	2 12E+00	7 21E-01	1 51E-01	4 23E+00	4 77E-00	-5 84E-01	3 93E+00	4 19E+00	3 04E+00	: 92E+01	2 20E+01	
	008	172 5	-159 4	2/3/20C9	12 19	1 98E+C3	5 45E+C2	3 85E+02	1 32E+01	1 45E+00	5 93E-01	-1 52E+00	3 63E+00	3 08E-00	-2 37E+0C	3 23E+00	2 94E+00	4 01E+00	2 37E+01	2 76E+01	
	009	172 5	-159 4	5/6/20C9	10 24	1 57E+C3	3 03E+C2	1 80E+02	8 59E+00	1 46E+00	7 75E-01	3 40E-01	5 16E+00	3 44E-00	1 02E-00	2 63E+00	3 14E+00	-1 38E+00	: 92E+01	2 20E+01	
	010	172 5	-159 4	8/4/20C9	11 15	1 87E+C3	3 56E+C2	2 34E+02	9 19E+00	1 51E+00	7 34E-01	1 49E+00	3 33E+00	3 97E-00	-6 51E-01	2 98E+00	3 14E+00	3 69E+00	2 19E+01	2 49E+01	
	011	172 5	-159 4	1'/13/2C09	12 04	1 83E+C3	3 15E+C2	2 33E+02	7 42E+00	1 29E+00	7 36E-01	7 30E-01	6 35E+00	7 30E-00	-1 25E+0C	7 27E+00	6 86E+00	-1 70E+00	: 91E+01	2 20E+01	
	012	172 5	-159 4	2/10/2010	10 34	1 61E+C3	2 00E+C2	1 53E+02	7 51E+00	1 53E+00	7 11E 01	2 09E+00	5 21E+00	6 19E-00	1 33E-00	5 75E+00	6 72E+00	2 00E+00	2 13E+01	2 50E+01	
	013	172 5	-159 4	5/3/2010	11 47	2 03E+C3	2 84E+C2	1 42E+02	6 38E+00	1 42E+00	5 34E-01	-3 37E-0:	8 87E+00	9 74E-00	2 77E-00	7 82E+00	9 75E+00	-1 65E+00	2 03E+01	2 33E+01	
	014	172 5	-159 4	8/4/2010	12 09	1 53E+C3	2 31E+C2	1 30E+02	5 97E+00	1 02E+00	3 24E-01	-7 48E+00	8 67E+00	7 10E-00	4 86E-01	9 45E+00	1 08E+01	-1 31E+00	: 66E+01	1 99E+01	
	015	172 5	-159 4	1'/23/2C10	12 25	1 51E+C3	2 28E+C2	1 24E+02	4 55E+00	1 28E+00	8 17E-01	-1 84E+00	7 05E+00	7 51E-00	-1 82E+0C	5 23E+00	6 51E+00	2 22E+00	: 84E+01	2 14E+01	
MW-54-190	001	190	-176 9	5/3/2C07	15 00	1 87E+C3	6 23E+C2	4 71E+02	1 35E+01	2 56E+00	7 30E-01	1 82E+00	3 23E+00	3 90E-00	3 32E-01	2 92E+00	3 30E+00	: 54E+00	: 88E+01	2 18E+01	MW-54-190

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	
MW-54-190	002	190	-176.9	7/31/2007	13:45	2.25E+03	6.12E+02	2.56E+02	1.79E+01	2.15E+00	7.59E-01	-2.13E+00	3.35E+00	3.12E-00	9.32E-01	3.02E+00	3.67E+00	-3.07E+00	1.66E+01	1.94E+01	MW-54-190
	003	190	-176.9	10/19/2007	12:20	2.13E+03	5.24E+02	3.50E+02	2.34E+01	2.46E+00	7.97E-01	-1.04E+00	3.45E+00	3.07E-00	7.41E-01	4.05E+00	3.33E+00	-3.33E+00	1.71E+01	1.97E+01	
	004	190	-176.9	1/15/2008	11:37	2.24E+03	6.26E+02	4.16E+02	1.93E+01	2.54E+00	8.15E-01	6.45E-01	2.64E+00	3.11E-00	-3.88E-01	2.23E+00	2.50E+00	9.23E+00	2.42E+01	2.75E+01	
	005	190	-176.9	5/2/2008	10:30	1.84E+03	1.98E+02	1.43E+02	1.35E+01	1.40E+00	7.38E-01	8.19E-01	1.58E+00	3.46E-00	8.81E-01	1.95E+00	3.51E+00	6.07E+00	1.25E+01	2.13E+01	
	006	190	-176.9	7/22/2008	15:50	1.25E+03	1.15E+02	1.30E+02	2.13E+01	1.37E+00	5.50E-01	8.45E-01	1.58E+00	3.41E-00	-1.64E+00	2.05E+00	3.02E+00	-8.42E+00	1.61E+01	2.92E+01	
	007	190	-176.9	11/11/2008	11:09	1.44E+03	2.10E+02	1.59E+02	3.88E+01	3.12E+00	6.14E-01	-5.41E-01	5.00E+00	5.54E-00	-6.47E-01	3.54E+00	3.63E+00	4.86E-01	1.91E+01	2.20E+01	
	008	190	-176.9	2/3/2009	12:35	1.43E+03	4.08E+02	3.80E+02	1.20E+01	1.95E+00	3.85E-01	1.18E+00	3.40E+00	3.74E-00	7.39E-01	3.03E+00	3.70E+00	5.10E+00	2.37E+01	2.84E+01	
	009	190	-176.9	5/6/2009	10:27	1.60E+03	3.05E+02	1.30E+02	1.20E+01	2.07E+00	4.10E-01	2.21E+00	7.22E+00	4.01E-00	-0.94E-01	3.05E+00	4.04E+00	-2.00E+00	1.94E+01	2.23E+01	
	010	190	-176.9	8/4/2009	11:20	1.94E+03	3.62E+02	2.36E+02	1.88E+01	2.00E+00	6.71E-01	-7.49E-01	3.31E+00	3.33E-00	9.28E-01	3.99E+00	4.39E+00	-1.51E+00	2.14E+01	2.47E+01	
	011	190	-176.9	1/11/2010	12:11	2.01E+03	3.27E+02	2.35E+02	1.78E+01	1.94E+00	4.40E-01	1.20E+00	3.64E+00	3.62E-00	3.18E-00	2.42E+00	1.03E+00	1.32E+00	1.96E+01	2.26E+01	
	012	190	-176.9	2/10/2010	10:32	1.57E+03	1.98E+02	1.54E+02	2.35E+01	2.67E+00	6.73E-01	2.84E+00	4.58E+00	6.01E-00	1.64E-01	5.12E+00	5.77E+00	-9.59E+00	1.68E+01	1.99E+01	
	013	190	-176.9	5/3/2010	12:01	1.71E+03	2.67E+02	1.44E+02	2.22E+01	2.61E+00	6.32E-01	3.80E+00	1.05E+01	1.25E-01	-3.30E+00	1.11E+01	1.14E+01	-5.89E+00	2.24E+01	2.66E+01	
	014	190	-176.9	8/4/2010	12:34	1.60E+03	2.33E+02	1.28E+02	1.57E+01	1.51E+00	2.37E-01	-1.62E+00	8.25E+00	8.88E-00	-1.20E+00	8.03E+00	9.41E+00	-3.22E+00	1.84E+01	2.21E+01	
	015	190	-176.9	11/23/2010	12:22	1.93E+03	2.55E+02	1.27E+02	1.92E+01	1.89E+00	7.12E-01	-9.54E-01	6.04E+00	6.61E-00	-2.29E+00	5.71E+00	6.79E+00	-3.18E-01	1.81E+01	2.14E+01	
MW-55-24	001	16	2.3	11/9/2006	13:20	2.00E+03	1.11E+03	1.30E+03	1.56E+01	2.40E+00	1.90E+00	-7.30E-01	4.50E+00	5.80E-00	4.00E-01	5.42E+00	6.70E+00	1.10E+00	5.40E+00	6.00E+00	MW-55-24
	002	16	2.3	6/28/2007	11:20	3.08E+03	2.96E+02	1.87E+02	3.75E+01	3.41E+00	1.06E+00	0.00E+00	4.00E+00	3.70E-00	1.15E-00	3.81E+00	4.60E+00	NA	NA	NA	
	003	16	2.3	8/2/2007	11:17	2.71E+03	7.28E+02	5.47E+02	2.31E+01	2.67E+00	9.19E-01	-4.91E-01	2.79E+00	3.02E-00	1.40E-00	2.94E+00	3.47E+00	-7.94E+00	1.91E+01	2.31E+01	
	004	16	2.3	10/16/2007	10:15	2.20E+03	5.36E+02	3.68E+02	2.29E+01	2.61E+00	8.13E-01	6.26E-01	3.63E+00	4.21E-00	7.46E-01	3.20E+00	3.47E+00	NA	NA	NA	
	005	16	2.3	1/28/2008	12:37	1.14E+03	3.62E+02	2.96E+02	2.20E+01	2.46E+00	9.24E-01	3.33E+00	3.26E+00	2.50E-00	1.04E-00	1.30E+00	2.51E+00	1.44E+01	1.82E+01	2.00E+01	
	006	16	2.3	4/25/2008	14:15	1.05E+03	1.59E+02	1.44E+02	2.55E+01	1.57E+00	4.39E-01	1.08E+00	2.31E+00	4.02E-00	-9.33E-01	2.55E+00	4.02E+00	1.25E+00	1.14E+01	1.97E+01	
	007	16	2.3	8/1/2008	13:15	1.40E+03	1.95E+02	1.71E+02	2.22E+01	1.36E+00	5.75E-01	-7.73E-03	2.19E+00	3.69E-00	-2.85E-00	2.34E+00	4.16E+00	6.11E+00	1.24E+01	2.11E+01	
	008	16	2.3	10/21/2008	13:19	7.82E+02	2.57E+02	1.93E+02	1.38E+01	1.30E+00	5.35E-01	1.30E+00	5.13E+00	5.92E-00	-3.49E+00	5.65E+00	6.59E+00	4.77E+00	1.79E+01	2.03E+01	
	009	16	2.3	2/11/2009	12:55	1.04E+03	4.49E+02	3.84E+02	1.59E+01	1.74E+00	3.35E-01	1.90E+00	2.68E+00	3.50E-00	1.35E-00	3.14E+00	3.76E+00	-1.21E+01	2.45E+01	2.99E+01	
	010	16	2.3	4/29/2009	11:28	1.14E+03	2.69E+02	1.80E+02	1.55E+01	1.88E+00	6.50E-01	-1.81E-01	1.12E+01	6.77E-00	-9.81E-01	4.91E+00	5.14E+00	4.88E+00	1.95E+01	2.22E+01	
	011	16	2.3	8/5/2009	13:52	1.59E+03	3.39E+02	2.37E+02	3.77E+01	2.52E+00	7.22E-01	-7.90E-01	3.74E+00	3.61E-00	1.05E-00	2.92E+00	3.52E+00	4.83E+00	2.26E+01	2.59E+01	
	012	16	2.3	11/2/2009	13:01	1.38E+03	2.27E+02	1.88E+02	1.93E+01	1.95E+00	7.59E-01	1.03E+01	9.51E+00	5.59E-00	3.87E-00	5.63E+00	7.18E+00	-7.44E+00	1.53E+01	1.80E+01	
	013	16	2.3	2/18/2010	14:01	2.21E+03	2.49E+02	1.74E+02	2.76E+01	2.46E+00	7.38E-01	4.99E+00	4.18E+00	5.27E-00	7.07E-01	4.32E+00	4.97E+00	-8.06E+00	1.86E+01	2.18E+01	
	014	16	2.3	4/21/2010	14:00	1.62E+03	4.65E+02	3.90E+02	1.34E+01	2.09E+00	8.88E-01	1.91E+00	7.13E+00	7.46E-00	6.66E-01	9.22E+00	1.03E+01	7.52E-01	1.79E+01	2.07E+01	
	015	16	2.3	8/6/2010	13:11	1.21E+03	2.12E+02	1.30E+02	8.54E+00	1.22E+00	4.51E-01	1.13E+00	8.54E+00	1.04E-01	0.62E-01	2.22E+00	2.59E+00	1.17E+01	1.64E+01	1.81E+01	
	016	16	2.3	11/1/2010	14:10	1.39E+03	2.09E+02	1.55E+02	1.38E+01	1.98E+00	9.92E-01	-2.29E-01	8.10E+00	9.04E-00	-4.71E+00	7.93E+00	8.54E+00	7.56E+00	1.88E+01	2.12E+01	
MW-55-55	001	32	-13.8	11/9/2006	13:40	9.04E+03	1.50E+03	1.30E+03	4.34E+01	4.80E+00	5.80E+00	-1.10E+00	5.50E+00	5.90E-00	-5.00E-01	5.53E+00	4.10E+00	4.80E+00	5.40E+00	5.80E+00	MW-55-55
	002	32	-13.8	6/28/2007	11:50	3.09E+03	2.93E+02	1.84E+02	3.25E+01	3.31E+00	9.74E-01	-4.54E-01	3.46E+00	3.78E-00	-1.10E+00	3.62E+00	3.75E+00	NA	NA	NA	
	003	32	-13.8	8/2/2007	11:20	3.68E+03	7.91E+02	5.33E+02	3.40E+01	3.45E+00	8.95E-01	9.35E-01	3.19E+00	3.24E-00	7.69E-01	2.23E+00	2.70E+00	2.90E+00	1.96E+01	2.28E+01	
	004	32	-13.8	10/16/2007	10:02	5.09E+03	7.34E+02	3.53E+02	3.16E+01	3.04E+00	1.04E+00	2.62E+00	3.36E+00	3.58E-00	1.44E-00	3.44E+00	4.20E+00	NA	NA	NA	
	005	32	-13.8	1/28/2008	11:46	2.33E+03	4.59E+02	2.97E+02	2.54E+01	2.60E+00	5.21E-01	-5.28E-01	2.12E+00	2.26E-00	-6.90E-01	2.18E+00	2.32E+00	1.12E+01	1.76E+01	1.96E+01	
	006	32	-13.8	4/25/2008	12:07	1.60E+03	1.86E+02	1.42E+02	3.44E+01	1.86E+00	6.11E-01	1.46E+00	2.26E+00	4.06E-00	2.34E-00	2.43E+00	4.61E+00	5.22E+00	1.25E+01	2.14E+01	
	007	32	-13.8	8/1/2008	10:47	1.73E+03	2.08E+02	1.91E+02	2.54E+01	1.42E+00	4.28E-01	3.51E-01	2.17E+00	3.74E-00	2.59E-01	2.33E+00	3.99E+00	1.26E+01	1.23E+01	2.05E+01	
	008	32	-13.8	2/4/2009	13:46	8.53E+02	4.28E+02	3.84E+02	1.71E+01	1.32E+00	4.39E-01	1.61E+00	3.14E+00	3.69E-00	1.50E-01	2.73E+00	3.15E+00	3.49E-01	2.30E+01	2.69E+01	
	009	32	-13.8	4/29/2009	11:26	2.70E+03	3.77E+02	1.30E+02	3.51E+01	2.79E+00	6.35E-01	-4.06E+00	6.72E+00	4.40E-00	7.97E-01	4.23E+00	5.04E+00	7.31E+00	2.02E+01	2.26E+01	
	010	32	-13.8	9/5/2009	13:40	2.03E+03	4.19E+02	2.30E+02	4.14E+01	2.30E+00	7.20E-01	-1.22E+00	3.52E+00	3.46E-00	2.60E-01	3.35E+00	3.79E+00	-2.63E+00	2.20E+01	2.61E+01	
	011	32	-13.8	11/2/2009	12:34	2.37E+03	2.64E+02	1.88E+02	2.36E+01	2.40E+00	7.17E-01	6.51E-01	4.23E+00	4.96E-00	2.97E-00	4.43E+00	5.72E+00	-9.10E+00	1.73E+01	2.02E+01	
	012	32	-13.8	2/18/2010	14:03	2.49E+03	2.60E+02	1.74E+02	5.10E+01	3.59E+00	7.35E-01	-2.47E+00	4.86E+00	5.03E-00	1.05E-00	4.88E+00	5.63E+00	-5.22E+00	1.85E+01	2.13E+01	
	013	32	-13.8	4/21/2010	14:31	2.01E+03	4.92E+02	3.90E+02	2.53E+01	2.44E+00	7.34E-01	-4.26E+00	8.04E+00	7.79E-00	2.77E-00	7.27E+00	9.17E+00	-4.98E-01	1.77E+01	2.06E+01	
	014	32	-13.8	8/6/2010	13:15	1.89E+03	2.46E+02	1.25E+02	1.56E+01	1.65E+00	3.57E-01	-4.27E-01	8.60E+00	9.69E-00	4.31E-00	9.65E+00	1.22E+01	9.65E+00	1.62E+01	1.81E+01	
	015	32	-13.8	11/1/2010	14:26	1.57E+03	2.12E+02	1.52E+02	1.13E+01	1.97E+00	9.17E-01	-2.41E+00	8.88E+00	9.46E-00	5.36E-01	8.13E+00	9.32E+00	6.22E+00	1.79E+01	2.03E+01	
MW-55-54	001	47	-28.8	11/9/2006	13:30	1.31E+04	1.68E+03	1.30E+03	2.28E+01	1.35E+00	8.10E-01	1.00E+00	3.30E+00	3.80E-00	-3.20E+00	4.53E+00	5.70E+00	1.70E+00	4.80E+00	5.40E+00	MW-55-54
	002	47	-28.8	6/28/2007	11:40	1.04E+04	4.79E+02	1.84E+02	2.47E+01	2.38E+00	9.35E-01	1.30E-01	3.69E+00	3.43E-00	-4.69E-01	3.27E+00	3.48E+00	NA	NA	NA	
	003	47	-28.8	8/2/2007	12:00	9.91E+03	1.19E+03	5.51E+02	2.22E+01	2.30E+00	9.10E-01	-1.09E+00	3.69E+00	3.80E-00	1.45E-00	2.87E+00	3.56E+00	6.13E+00	1.99E+01	2.29E+01	
	004	47	-28.8	10/16/2007	10:05	1.03E+04	9.96E+02	3.51E+02	2.33E+01	2.19E+00	6.15E-01	9.80E-01	2.62E+00	3.02E-00	8.80E-01	3.65E+00	2.99E+00	NA	NA	NA	
	005	47	-28.8	1/28/2008	11:42	7.40E+03	7.35E+02	2.97E+02	2.20E+01	2.40E+00	5.39E-01	-0.47E-01	2.16E+00	2.30E-00	-1.29E+00	2.01E+00	2.20E+00	-1.09E+01	1.80E+01	2.05E+01	
	006	47	-28.8	4/25/2008	10:35	5.96E+03	3.39E+02	1.44E+02	2.57E+01	1.62E+00	6.36E-01	1.74E+00	2.35E+00	4.25E-00	1.63E-00	2.59E+00	4.75E+00	7.69E+00	1.25E+01	2.13E+01	
	007	47	-28.8	8/1/2008	10:58	6.81E+03	5.59E+02	1.71E+02	2.32E+01	1.50E+00	3.56E-01	2.17E+00	3.52E-00	1.72E+00	1.72E+00	3.50E+00	1.36E+01	2.46E+01	2.68E+01		
	008	47	-28.8	10/21/2008	10:21	7.76E+03	6.65E+02	1.96E+02	1.94E+01	2.37E+00	6.25E-01	-3.17E+00	5.29E+00	5.27E-00	-1.63E+00	5.43E+00	5.54E+00	-9.99E+00	1.69E+01	2.01E+01	
	009	47	-28.8	2/4/2009	12:42	7.33E+03	9.09E+02	3.82E+02	2.11E+01	2.01E+00	3.59E-01	-3.84E-01	3.11E+00	3.46E-00	-3.64E-01	3.33E+00	3.69E+00	5.24E+00	2.34E+01	2.76E+01	
	010	47	-28.8	4/29/2009	10:55	7.00E+03	5.76E+02	1.80E+02	3.27E+01	2.55E+00	6.48E-01	3.95E-01	6.53E+00	4.62E-00	-1.58E+00	4.23E+00	4.33E+00	2.56E+00	1.79E+01	2.04E+01	
	011	47	-28.8	8/5/2009	13:25	5.47E+03	5.45E+02	2.35E+02	2.35E+01	2.43E+00	6.15E-01	-1.05E-01	2.76E+00	3.04E-00	-1.85E+00	3.17E+00	3.17E+00	8.36E+00	2.34E+01	2.65E+01	
	012	47	-28.8	11/2/2009	12:33	5.82E+03	3.65E+02	1.87E+02	2.33E+01	2.12E+00	4.76E-01	1.23E+00	5.73E+00	6.54E-00	2.82E-00	5.22E+00	7.55E+00	-2.77E+00	1.91E+01	2.20E+01	
	013	47	-28.8	2/18/2010	14:05	8.23E+03	4.13E+02	1.74E+02	1.57E+01	2.27E+00	7.51E-01	-1.16E+00	3.60E+00	3.94E-00	6.65E-01	4.04E+00	4.57E+00	-1.58E+01	1.80E+01	2.15E+01	
	014	47	-28.8	4/21/2010	13:56	1.13E+04	9.27E+02	3.88E+02	2.32E+01	2.31E+00	8.89E-01	-5.23E+00	1.21E+01	1.49E-01	-4.30E+00	1.11E+01	1.10E+01	-3.67E+00	1.79E+01	2.06E+01	
	015	47	-28.8	8/6/2010	12:50	9.74E+03	5.22E+02	1.28E+02	1.33E+01	1.88E+00	3.96E-01	1.51E+00	7.77E+00	8.26E-00	1.82E-00	7.25E+00	8.71E+00	1.77E-01	1.41E+01	1.65E+01	
	016	47	-28.8	11/1/2010	13:36	8.68E+03	3.92E+02	1.57E+02	1.93E+01	1.72E+00	6.48E-01	-3.03E+00	7.29E+00	7.24E-00	-9.59E-01	7.03E+00	8.63E+00	1.12E-01	1.77E+01	2.04E+01	
MW-56-53	001	52	18.3	2/4/2007	9:39	7.80E+02	5.40E+02	5.10E+02	-9.00E-02	7.80E-01	8.30E-01	1.26E+01	4.60E+00	4.20E-00	2.00E-00	3.62E+00	3.80E+00	-3.70E+00	6.60E+00	7.80E+00	MW-56-53
	002	52	18.3	6/26/2007	10:51	2.89E+02	1.70E+02	1.32E+02	-4.49E-02	5.50E-01	6.56E-01	-5.50E-01	4.46E+00	4.11E-00	2.95E-00	4.88E+00	4.84E+00	1.30E+00	1.41E+01	1.62E+01	
	003	52	18.3	8/10/2007	12:25	2.16E+02	1.86E+02	2.23E+02	-5.66E-01	6.10E-01	9.34E-01	8.31E-01	2.79E+00	3.21E-00	3.59E-02	2.55E+00	2.85E+00	NA	NA	NA	

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	
MW-56-53	004	52	18 3	1/31/2008	12 30	2 63E+C2	1 27E+C2	1 31E+02	5 70E-0:	8 81E-0:	9 77E-01	3 38E-01	3 69E+00	3 87E-00	5 97E-01	3 43E+00	3 99E+00	: 74E+00	: 55E+01	1 80E+01	MW-56-53
	005	52	13 3	10/24/2008	12 21	3 99E+C2	1 64E+C2	1 55E+02	5 40E-0:	5 47E-0:	5 45E-01	-7 92E-02	5 88E+00	6 64E-00	-5 42E+00	7 44E+00	6 23E+00	NA	NA	NA	
	006	52	18 3	4/16/2009	11 43	5 00E+C2	1 95E+C2	1 96E+02	-8 46E-02	6 21E-0:	7 53E-01	6 63E-01	6 14E+00	4 09E-00	2 85E-00	3 41E+00	4 34E+00	NA	NA	NA	
	007	52	18 3	11/4/2009	14 09	6 86E+C2	1 38E+C2	1 33E+02	2 94E-0:	6 00E-0:	6 31E-01	5 47E-01	6 74E+00	7 50E-00	2 77E-00	5 21E+00	7 63E+00	NA	NA	NA	
	008	52	18 3	4/20/2010	15 23	2 58E+C2	1 65E+C2	1 75E+02	-1 49E-01	5 35E-0:	7 38E-01	3 61E+00	7 63E+00	9 44E-00	-1 55E+00	8 91E+00	9 68E+00	NA	NA	NA	
	009	52	18 3	1/14/2011	17 48	4 64E+C2	1 88E+C2	1 83E+02	1 77E+00	8 57E-0:	1 86E+00	3 71E+00	4 39E+00	1 06E-01	-1 74E+00	4 88E+00	9 96E+00	NA	NA	NA	
MW 56 03	001	74	3 7	9/8/2006	11 15	5 40E+C2	1 62E+C2	1 26E+02	2 70E+00	1 12E+00	9 59E 01	1 82E+00	6 51E+00	9 45E-00	2 15E 01	5 23E+00	6 87E+00	NA	NA	NA	MW 56 03
	002	74	-3 7	11/9/2006	10 20	1 65E+C2	1 35E+C2	1 40E+02	7 00E-02	7 20E-0:	8 10E-01	7 70E-01	2 70E+00	3 10E 00	-2 20E-01	2 91E+00	3 50E+00	3 30E+00	5 40E+00	5 80E+00	
	003	74	-3 7	1/4/2007	13 20	1 28E+C3	5 70E+C2	5 20E+02	2 30E+00	9 30E-0:	8 90E-01	1 18E+01	4 80E+00	4 40E-00	1 00E-01	3 00E+00	3 60E+00	-7 00E-01	7 80E+00	8 80E+00	
	004	74	-3 7	6/22/2007	10 44	1 85E+C3	5 76E+C2	4 30E+02	1 37E+00	1 15E+00	1 09E+00	1 14E-01	3 59E+00	3 85E-00	-1 87E+00	2 82E+00	3 52E+00	2 46E+00	3 52E+00	3 46E+01	
	005	74	-3 7	8/10/2007	11 10	1 49E+C3	5 52E+C2	4 55E+02	2 43E+00	1 05E+00	9 23E-01	-9 15E-0:	3 66E+00	4 02E-00	1 87E-01	2 75E+00	3 15E+00	NA	NA	NA	
	006	74	-3 7	1/31/2008	9 30	1 94E+C3	1 97E+C2	1 34E+02	3 56E+00	1 34E+00	9 49E-01	-8 03E-0:	3 69E+00	3 23E-00	1 60E-00	2 73E+00	3 51E+00	5 57E-01	1 59E+01	1 85E+01	
	007	74	-3 7	10/24/2008	12 22	2 98E+C3	7 91E+C2	5 91E+02	2 13E+00	7 32E-0:	4 34E-01	-1 15E+00	4 42E+00	4 98E-00	3 29E-00	5 53E+00	8 07E+00	NA	NA	NA	
	008	74	-3 7	4/16/2009	11 49	3 24E+C3	7 61E+C2	4 34E+02	2 71E+00	7 59E-0:	4 21E-01	6 03E-03	5 39E+00	3 59E-00	1 38E-00	4 11E+00	4 92E+00	NA	NA	NA	
	009	74	-3 7	11/4/2009	15 47	3 15E+C3	2 46E+C2	1 02E+02	2 78E+00	8 12E-0:	4 70E-01	2 01E+00	5 22E+00	6 13E-00	-1 15E+00	5 95E+00	6 35E+00	NA	NA	NA	
	010	74	-3 7	4/20/2010	14 51	1 94E+C3	2 96E+C2	1 48E+02	1 99E+00	1 05E+00	8 74E-01	2 04E+00	8 13E+00	9 48E-00	-1 15E+00	8 71E+00	9 04E+00	NA	NA	NA	
	011	74	-3 7	1/14/2011	14 37	2 74E+C3	2 63E+C2	1 34E+02	1 32E+00	7 30E-0:	1 50E+00	-2 51E+00	3 67E+00	7 93E-00	-2 67E+00	3 93E+00	7 34E+00	NA	NA	NA	
MW 57 11	001	10	5	6/22/2007	12 17	4 61E+C3	8 10E+C2	4 36E+02	4 55E+01	3 96E+00	7 27E 01	2 29E+00	6 64E+00	4 31E-00	3 69E 02	3 87E+00	4 37E+00	2 29E+01	: 79E+01	1 91E+01	MW 57 11
	002	10	5	8/6/2007	12 30	4 09E+C3	3 21E+C2	1 97E+02	3 79E+01	2 77E+00	5 36E-01	1 15E+00	3 78E+00	4 16E-00	3 95E-03	3 01E+00	3 41E+00	-5 75E-01	2 16E+01	2 30E+01	
	003	10	5	5/5/2008	12 43	2 17E+C3	2 29E+C2	2 55E+02	2 27E+01	1 95E+00	9 36E-01	8 71E-01	2 21E+00	3 83E-00	2 87E-00	2 23E+00	4 47E+00	-1 12E+00	: 35E+01	2 34E+01	
	004	10	5	1/12/2008	10 55	3 28E+C3	2 76E+C2	1 73E+02	4 16E+01	3 59E+00	1 54E-01	3 34E+00	1 25E+00	4 76E-00	1 81E-00	3 73E+00	5 03E+00	-5 18E-01	2 02E+01	2 35E+01	
	005	10	5	4/21/2009	12 08	4 22E+C3	4 29E+C2	1 90E+02	4 72E+01	2 97E+00	5 57E-01	3 89E+00	6 71E+00	4 47E-00	1 11E-00	2 73E+00	3 35E+00	4 47E+00	: 98E+01	2 25E+01	
	006	10	5	5/4/2010	12 36	3 27E+C3	3 48E+C2	1 72E+02	2 46E+01	3 00E+00	8 46E-01	8 07E-01	6 20E+00	6 51E-00	1 85E-01	5 02E+00	5 67E+00	-1 79E+01	2 21E+01	2 56E+01	
MW-57-20	001	19	-4	6/22/2007	12 30	1 65E+C3	5 58E+C2	4 32E+02	1 96E+00	1 07E+00	9 57E-01	-1 33E+00	3 69E+00	3 90E-00	-9 51E-01	3 65E+00	3 84E+00	4 77E-01	: 36E+01	1 55E+01	MW-57-20
	002	19	-4	8/6/2007	12 15	9 96E+C2	2 15E+C2	1 96E+02	1 23E+00	6 57E-0:	5 78E-01	1 21E+00	3 59E+00	3 64E-00	6 05E-01	2 75E+00	3 22E+00	-1 19E+01	2 06E+01	2 46E+01	
	003	19	-4	5/5/2008	13 18	7 27E+C2	1 45E+C2	1 97E+02	1 23E+00	2 16E-0:	2 35E-01	-2 17E+00	1 59E+00	2 84E-00	-9 61E-01	3 63E+00	4 56E+00	-5 89E+00	9 27E+00	1 62E+01	
	004	19	-4	1/12/2008	11 30	1 51E+C3	2 16E+C2	1 72E+02	3 36E+00	1 10E+00	1 14E+00	-1 91E+00	3 64E+00	3 82E-00	-4 35E-01	3 57E+00	3 67E+00	-5 58E-01	: 96E+01	2 25E+01	
	005	19	-4	4/21/2009	12 22	1 52E+C3	2 07E+C2	1 90E+02	2 77E+00	1 02E+00	8 57E 01	2 08E+00	5 76E+00	3 94E-00	2 32E-00	3 15E+00	4 06E+00	: 37E+01	2 16E+01	2 41E+01	
	006	19	-4	5/4/2010	12 45	0 07E+C2	2 04E+C2	1 51E+02	1 12E+00	9 35E-0:	8 77E-01	-2 11E+00	7 55E+00	8 24E 00	-2 23E-01	7 54E+00	8 56E+00	-6 07E+00	2 15E+01	2 51E+01	
MW-57-45	001	40	-25	8/24/2006	9 30	4 06E+C3	8 82E+C2	7 71E+02	NA	NA	NA	-2 83E-0:	4 41E+00	4 80E-00	-1 81E-01	3 89E+00	4 37E+00	NA	NA	NA	MW-57-45
	001	40	-25	8/24/2006	9 30	4 00E+C3	6 98E+C2	3 17E+02	1 38E+01	3 31E+00	2 18E+00	-5 40E-0:	6 75E+00	7 56E-00	1 12E-00	5 53E+00	7 50E+00	8 25E+00	9 09E+00	9 70E+00	
	002	40	-25	6/22/2007	12 55	9 55E+C2	4 85E+C2	4 35E+02	1 90E+00	1 05E+00	8 55E-01	-1 97E-0:	3 40E+00	3 82E-00	-8 51E-01	3 52E+00	3 65E+00	5 46E-01	: 23E+01	1 43E+01	
	003	40	-25	8/6/2007	12 17	7 40E+C2	2 07E+C2	1 98E+02	2 55E+00	8 77E-0:	6 39E-01	-3 91E-0:	3 15E+00	3 42E-00	-1 89E-01	3 52E+00	3 35E+00	-1 15E+01	2 09E+01	2 45E+01	
	004	40	-25	5/5/2008	14 59	5 65E+C2	1 38E+C2	1 97E+02	2 26E+00	2 91E-0:	3 58E-01	-1 35E-0:	1 68E+00	2 84E-00	-4 61E-01	1 65E+00	2 69E+00	-3 69E+00	9 38E+00	1 62E+01	
	005	40	-25	1/12/2008	13 22	1 13E+C3	2 01E+C2	1 73E+02	1 20E+00	6 79E-0:	5 97E-01	1 72E-01	3 63E+00	4 05E-00	9 15E-01	4 42E+00	5 17E+00	-2 81E+00	1 91E+01	2 22E+01	
	006	40	-25	4/21/2009	13 34	1 19E+C3	2 64E+C2	1 90E+02	2 25E+00	8 36E-0:	6 44E-01	1 80E-01	5 64E+00	3 76E-00	-1 30E+00	3 95E+00	4 12E+00	8 26E+00	2 09E+01	2 35E+01	
	007	40	-25	5/4/2010	13 24	0 79E+C2	2 19E+C2	1 72E+02	1 30E+00	9 43E-0:	8 55E-01	6 76E-02	5 31E+00	5 86E-00	-2 99E-01	4 77E+00	5 16E+00	7 57E-01	2 26E+01	2 58E+01	
MW-58-26	001	20	-5 4	1/16/2006	13 25	-2 60E+01	1 59E+C2	1 50E+02	3 70E-0:	7 50E-0:	8 20E-01	7 27E+01	8 40E+00	4 50E-00	-9 00E-01	3 33E+00	4 30E+00	-3 20E+00	5 70E+00	6 40E+00	MW-58-26
	002	20	-5 4	5/5/2007	0 57	2 60E+C2	1 00E+C2	1 30E+02	-0 00E-02	7 50E-0:	0 50E-01	2 34E+00	2 57E+00	3 20E 00	9 50E-01	2 73E+00	3 10E+00	-3 90E+00	6 30E+00	7 40E+00	
	003	20	-5 4	6/21/2007	11 10	5 97E+C2	2 00E+C2	1 36E+02	1 34E+00	6 29E-0:	5 25E-01	1 62E+00	2 42E+00	2 00E 00	-3 84E-01	2 42E+00	2 60E+00	: 07E+00	: 24E+01	1 45E+01	
	004	20	-5 4	7/31/2007	11 00	5 58E+C2	3 99E+C2	2 58E+02	1 32E+00	6 33E-0:	5 78E-01	1 18E+00	3 31E+00	3 83E-00	4 20E-01	3 01E+00	3 5 .E+00	NA	NA	NA	
	005	20	-5 4	1/22/2008	13 20	2 90E+C2	1 62E+C2	1 70E+02	-1 45E-01	4 55E-0:	6 50E-01	9 79E-01	2 31E+00	2 67E-00	-5 41E-02	2 57E+00	2 67E+00	NA	NA	NA	
	006	20	-5 4	11/7/2008	13 39	2 38E+C2	1 55E+C2	1 53E+02	2 31E-0:	6 50E-0:	7 90E-01	-3 38E+00	6 24E+00	5 49E-00	-3 23E-01	4 53E+00	4 84E+00	NA	NA	NA	
	007	20	-5 4	2/3/2009	12 49	5 19E+C2	2 36E+C2	1 98E+02	-8 35E-03	5 27E-0:	6 33E-01	1 40E+00	2 76E+00	3 29E-00	1 45E-01	3 09E+00	3 31E+00	NA	NA	NA	
	008	20	-5 4	4/24/2009	12 21	4 13E+C2	1 48E+C2	1 47E+02	-5 74E-02	4 53E-0:	5 77E-01	1 26E+00	4 28E+00	2 85E-00	1 02E-01	2 31E+00	2 57E+00	NA	NA	NA	
	009	20	-5 4	10/23/2009	13 10	4 23E+C2	1 67E+C2	1 58E+02	4 74E-0:	6 36E-0:	6 95E-01	1 68E+00	5 05E+00	5 98E-00	2 49E-00	5 63E+00	6 94E+00	NA	NA	NA	
	010	20	-5 4	4/30/2010	14 12	5 75E+C2	1 80E+C2	1 82E+02	2 92E-0:	5 47E-0:	6 20E-01	4 25E-01	5 59E+00	6 27E-00	9 40E-01	5 75E+00	6 68E+00	NA	NA	NA	
	011	20	-5 4	1/11/2011	15 12	3 65E+C2	1 74E+C2	1 44E+02	4 13E-0:	7 89E-0:	8 27E-01	1 98E+00	3 51E+00	4 51E-00	2 99E-00	3 75E+00	4 70E+00	NA	NA	NA	
MW 58 65	001	54	39 4	1/16/2006	13 18	9 60E+01	1 59E+C2	1 50E+02	6 00E 02	7 20E 0:	8 10E 01	2 20E+00	3 00E+00	3 30E-00	9 00E 01	1 22E+00	1 90E+00	3 40E+00	6 90E+00	7 80E+00	MW 58 65
	002	54	-39 4	5/5/2007	9 25	5 50E+C2	5 40E+C2	5 20E+02	1 60E-0:	0 10E-0:	0 30E-01	-1 95E+00	2 22E+00	3 00E 00	-1 30E-01	2 73E+00	3 20E+00	-1 40E+00	7 00E+00	8 70E+00	
	003	54	-39 4	6/21/2007	11 10	3 15E+C2	1 77E+C2	1 81E+02	-1 90E-01	3 90E-0:	5 30E-01	-2 19E-0:	2 37E+00	2 63E-00	-2 89E+00	3 17E+00	3 36E+00	2 86E+00	: 26E+01	1 45E+01	
	004	54	-39 4	7/31/2007	11 00	3 42E+C2	3 02E+C2	2 72E+02	6 20E-03	3 19E-0:	6 52E-01	2 18E+00	3 39E+00	3 63E-00	3 24E+00	3 39E+00	NA	NA	NA		
	005	54	-39 4	1/22/2008	12 00	3 13E+C2	1 62E+C2	1 59E+02	1 21E-0:	5 85E-0:	7 22E-01	5 54E-01	3 53E+00	3 92E-00	-1 23E-01	3 22E+00	3 05E+00	NA	NA	NA	
	006	54	-39 4	11/7/2008	13 55	2 81E+C2	1 55E+C2	1 52E+02	8 19E-0:	8 77E-0:	8 82E-01	-9 13E-02	3 38E+00	3 86E-00	-1 59E+00	3 21E+00	2 98E+00	NA	NA	NA	
	007	54	-39 4	2/3/2009	12 05	2 75E+C2	2 03E+C2	1 98E+02	6 60E-0:	8 00E-0:	8 56E-01	-8 45E-0:	3 21E+00	3 41E-00	1 91E-00	3 09E+00	3 89E+00	NA	NA	NA	
	008	54	-39 4	4/24/2009	11 52	2 33E+C2	1 67E+C2	1 78E+02	-2 36E-01	4 52E-0:	6 58E-01	9 67E-02	3 66E+00	2 57E-00	-1 84E-01	2 45E+00	2 72E+00	NA	NA	NA	
	009	54	-39 4	10/23/2009	12 53	2 37E+C2	1 56E+C2	1 55E+02	6 33E-0:	6 12E-0:	6 29E-01	7 13E-01	5 70E+00	6 42E-00	2 45E-00	5 97E+00	7 18E+00	NA	NA	NA	
	010	54	-39 4	4/30/2010	13 51	3 59E+C2	1 64E+C2	1 72E+02	7 38E-0:	5 17E-0:	6 40E-01	1 70E+00	8 09E+00	9 07E-00	3 34E-01	5 75E+00	6 60E+00	NA	NA	NA	
	011	54	-39 4	1/11/2011	13 53	4 81E+C2	1 88E+C2	1 45E+02	7 15E-0:	7 72E-0:	8 31E-01	2 61E-01	3 71E+00	4 18E-00	3 74E-00	4 41E+00	5 49E+00	NA	NA	NA	
MW 59 32	001	27	12 5	1/16/2006	11 05	2 80E+C1	1 77E+C2	1 80E+02	6 00E 02	7 20E 0:	7 90E 01	8 60E 01	2 51E+00	3 30E-00	3 00E 01	1 22E+00	1 90E+00	2 60E+00	6 60E+00	7 50E+00	MW 59 32
	002	27	-12 5	5/5/2007	9 41	1 35E+C2	1 77E+C2	1 80E+02	3 00E-0:	7 50E-0:	8 20E-01	1 10E+00	3 00E+00	4 10E-00	1 30E-00	3 93E+00	4 40E+00	-1 90E+00	6 90E+00	8 10E+00	
	003	27	-12 5	6/21/2007	15 25	4 67E+C2	4 23E+C2	4 36E+02	-6 68E-02	6 78E-0:	9 11E-01	6 01E-01	3 56E+00	4 59E-00	-4 19E-01	4 45E+00	4 71E+00	-4 37E-01	: 24E+01	1 45E+01	
	004	27	-12 5	7/31/2007	14 35	1 69E+C2	1 59E+C2	1 53E+02	2 00E-0:	6 72E-0:	7 86E-01	2 26E-01	3 30E+00	3 73E-00	7 57E-01	3 12E+00	3 75E+00	NA	NA	NA	
MW-59-45	001	42	-27 5	1/16/2006	11 18	5 50E+C1	1 74E+C2	1 70E+02	2 40E-0:	7 20E-0:	8 30E-01	3 74E+01	8 70E+00	6 20E-00	2 60E-00	4 22E+00	4 50E+00	-1 60E+00	5 70E+00	6 60E+00	MW-59-45

See Page 32 for Notes

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	
MW-59-45	002	42	-27 5	/5/20C7	9 48	8 80E+C1	1 80E+C2	1 80E+02	0 00E+00	7 80E-0:	8 70E-01	1 49E+02	1 26E+01	4 90E−00	2 00E-01	3 92E+00	4 60E+00	-2 50E+00	7 50E+20	8 6CE+00	MW-59-45
	003	42	-27 5	6/21/2007	15 25	7 54E+C2	4 59E+C2	4 34E+02	-2 74:-01	6 86E-0:	9 10E-01	-1 10E-0:	2 20E+00	2 83E−00	8 14E-02	2 15E+00	2 49E+00	7 74E-21	1 47E+21	1 71E+01	
	004	42	-27 5	7/31/2007	13 58	2 49E+C2	1 74E+C2	1 55E+02	1 64E-0:	5 90E-0:	7 05E-01	4 48E-01	3 52E+00	3 70E−00	7 64E-01	3 35E+00	3 94E+00	NA	NA	NA	
MW-59-68	001	58	-43 5	1:/16/2C06	11 30	5 50E+C1	1 74E+C2	1 30E+02	1 20E-0:	7 20E-0:	8 10E-01	1 15E+02	1 11E+01	5 60E−00	1 03E−00	3 03E+00	3 60E+00	-2 30E+00	5 70E+20	6 4CE+00	MW-59-68
	002	58	-43 5	/5/20C7	10 05	1 56E+C2	1 83E+C2	1 80E+02	3 30E-0:	8 10E-0:	8 90E-01	6 56E+01	6 60E+00	4 10E−00	-8 00E-01	3 63E+00	4 10E+00	: 90E+00	2 50E+20	8 4CE+00	
	003	58	-43 5	6/21/2007	15 25	5 90E+C2	4 41E+C2	4 39E+02	2 97E-0:	8 79E-0:	1 03E+00	6 26E+01	3 60E+00	3 80E−00	1 27E−00	2 91E+00	3 67E+00	-4 23E+00	: 30E+21	1 56E+01	
	004	58	-43 5	7/31/2007	13 59	8 19E+C2	4 02E+C2	2 58E+02	3 66E 0:	7 09E 0:	7 98E 01	9 02E 01	2 68E+00	2 95E−00	3 72E 01	2 77E+00	3 17E+00	NA	NA	NA	
MW-60-35	001	34 9	-22 4	5/8/20C7	13 27	-9 12E100	1 40E 02	1 79E 02	-1 79:-01	5 20E-0:	7 52E-01	1 41E100	4 64E100	3 30E 00	2 45E 00	3 72E100	4 67E100	0 00E100	: 81E+21	2 12E+01	MW-60-35
	002	34 9	-22 4	7/27/2007	13 07	7 61E+C2	2 40E+C2	1 78E+02	6 48E-0:	3 80E-0:	4 36E-01	5 95E-01	4 26E+00	3 23E−00	-3 31E-01	3 07E+00	3 39E+00	NA	NA	NA	
	003	34 9	-22 4	1/9/2007	13 20	1 84E+C2	1 48E+C2	1 01E+02	3 01E-0:	3 27E-0:	6 78E-01	1 11E+00	6 06E+00	3 54E−00	0 00E−00	2 64E+00	2 6.E+00	NA	NA	NA	
	004	34 9	-22 4	1/14/2008	17 05	7 78E+C1	1 58E+C2	1 78E+02	5 05E-0:	8 10E-0:	8 98E-01	1 11E+00	3 21E+00	3 79E−00	-9 56E-01	3 36E+00	3 54E+00	NA	NA	NA	
	005	34 9	-22 4	4/24/2008	15 30	5 51E+C1	1 14E+C2	1 95E+02	3 45E-0:	4 83E-0:	8 34E-01	-8 41E-0:	2 06E+00	3 37E−00	-8 73E-01	1 68E+00	2 56E+00	NA	NA	NA	
	006	34 9	-22 4	7/30/2008	16 10	1 95E+C2	1 21E+C2	1 91E+02	2 05E-0:	3 50E-0:	5 92E-01	1 81E+00	1 93E+00	3 50E−00	-1 19E+00	2 07E+00	3 20E+00	NA	NA	NA	
	007	34 9	-22 4	11/5/2008	15 03	1 42E+C2	1 80E+C2	1 99E+02	1 62E-0:	5 31E-0:	6 39E-01	-2 38E+00	5 67E+00	6 17E−00	-3 63E+00	8 52E+00	7 56E+00	NA	NA	NA	
	008	34 9	-22 4	2/9/20C9	16 12	2 00E+C2	1 83E+C2	1 98E+02	3 81E-0:	8 27E-0:	9 42E-01	-1 20E+00	3 09E+00	3 19E−00	-3 23E-01	3 03E+00	3 22E+00	-3 26E+00	2 39E+21	2 82E+01	
	009	34 9	-22 4	4/9/20C9	14 06	1 54E+C2	1 64E+C2	1 71E+02	2 06E-0:	6 48E-0:	7 90E-01	1 11E+00	8 76E+00	5 84E−00	7 57E-01	5 67E+00	6 68E+00	NA	NA	NA	
	010	34 9	-22 4	8/11/2009	14 41	2 60E+C2	1 49E+C2	1 53E+02	3 16E-0:	4 41E-0:	4 71E-01	2 47E+00	5 67E+00	6 63E−00	3 45E−00	5 13E+00	7 58E+00	5 77E+00	: 79E+21	2 03E+01	
	011	34 9	-22 4	10/30/2009	15 10	2 29E+C2	1 52E+C2	1 51E+02	2 24E 0:	6 33E 0:	7 51E 01	3 67E+00	1 00E+01	1 12E−01	4 15E−00	6 72E+00	8 44E+00	NA	NA	NA	
	012	34 9	-22 4	3/1/2010	11 18	2 48E+C2	1 64E+C2	1 74E+02	5 08E-0:	6 83E-0:	7 32E-01	-1 38E+00	6 15E+00	5 99E−00	-1 00E+00	3 73E+00	4 07E+00	-1 11E+01	: 88E+21	2 21E+01	
	013	34 9	-22 4	5/10/2010	15 58	2 85E+C2	1 46E+C2	1 35E+02	2 09E-02	5 25E-0:	6 56E-01	-1 78E+00	7 56E+00	8 03E−00	-1 43E+00	9 12E+00	9 76E+00	4 12E-21	2 24E+21	2 56E+01	
	014	34 9	-22 4	8/16/2010	14 43	2 35E+C2	1 42E+C2	1 41E+02	3 19E-0:	6 48E-0:	7 89E-01	3 02E-01	5 03E+00	6 47E−00	-1 36E+00	5 23E+00	6 68E+00	-4 52E+00	2 14E+21	2 52E+01	
	015	34 9	-22 4	1:/18/2C10	13 25	2 44E+C2	1 85E+C2	4 20E+02	-5 333-01	6 54E-0:	1 73E+00	9 47E-01	4 60E+00	1 08E−01	-4 28E-01	4 55E+00	5 75E+00	-1 11E+01	8 47E+20	1 92E+01	
MW-60-53	001	53 4	-40 9	5/8/20C7	11 52	5 32E+C1	1 58E+C2	1 82E+02	-4 92:-01	5 52E-0:	8 96E-01	-2 83E+00	4 66E+00	4 07E−00	2 15E-01	3 52E+00	4 12E+00	3 58E+00	: 84E+21	2 12E+01	MW-60-53
	002	53 4	-40 9	7/27/2007	12 50	1 25E+C2	1 71E+C2	1 87E+02	-4 72:-01	5 26E-0:	7 31E-01	1 46E-01	3 01E+00	3 34E−00	7 87E-01	3 25E+00	3 79E+00	NA	NA	NA	
	003	53 4	-40 9	1/9/2007	12 22	1 13E+C2	1 44E+C2	1 56E+02	6 19E-0:	6 50E-0:	6 79E-01	-2 11E+00	3 39E+00	3 51E−00	3 62E-01	2 79E+00	3 2.E+00	NA	NA	NA	
	004	53 4	-40 9	1/14/2008	15 40	5 35E+C1	1 55E+C2	1 78E+02	-1 69:-01	5 28E-0:	7 59E-01	-1 10E+00	2 78E+00	2 88E−00	-1 89E+00	2 94E+00	2 76E+00	NA	NA	NA	
	005	53 4	-40 9	4/24/2008	12 18	-1 77E+01	1 12E+C2	1 96E+02	5 27E-0:	5 19E-0:	8 52E-01	-4 84E-0:	2 47E+00	4 13E−00	-1 36E+00	2 53E+00	3 95E+00	NA	NA	NA	
	006	53 4	-40 9	7/30/2008	13 23	1 28E+C2	9 80E+C1	1 53E+02	6 53E 0:	5 33E 0:	8 58E 01	1 58E 0:	2 09E+00	3 43E−00	1 05E−00	2 01E+00	3 65E+00	NA	NA	NA	
	007	53 4	-40 9	11/5/2008	14 32	1 30E+C2	1 00E+C2	1 29E+02	-1 95:-01	5 22E-0:	8 17E-01	8 77E-01	4 50E100	5 22E 00	1 33E 00	5 73E100	6 68E100	NA	NA	NA	
	008	53 4	-40 9	2/9/20C9	11 28	1 31E+C2	1 79E+C2	1 98E+02	4 81E-0:	8 39E-0:	9 06E-01	-1 28E+00	3 80E+00	3 55E−00	5 34E-01	2 73E+00	3 22E+00	-1 24E+00	2 43E+21	2 85E+01	
	009	53 4	-40 9	5/5/20C9	10 08	4 99E+C2	2 12E+C2	1 75E+02	6 40E-02	6 75E-0:	8 32E-01	1 53E-01	1 18E+01	7 85E−00	-3 04E+00	8 53E+00	7 85E+00	0 00E+00	2 59E+21	2 81E+01	
	010	53 4	-40 9	8/11/2009	14 26	2 03E+C2	1 56E+C2	1 59E+02	1 35E-0:	7 18E-0:	8 59E-01	1 11E+00	4 66E+00	5 53E−00	4 62E-02	4 83E+00	5 44E+00	-3 23E+00	: 71E+21	2 00E+01	
	011	53 4	-40 9	10/30/2009	14 19	1 47E+C2	1 47E+C2	1 51E+02	1 24E-0:	4 95E-0:	6 12E-01	-2 86E-0:	6 68E+00	7 53E−00	-3 34E-02	5 95E+00	7 65E+00	NA	NA	NA	
	012	53 4	-40 9	3/1/2010	11 07	1 37E+C2	1 59E+C2	1 75E+02	1 14E-0:	5 56E-0:	7 30E-01	-1 22E+00	4 51E+00	4 92E−00	-8 72E-01	4 93E+00	5 33E+00	-5 31E+00	: 95E+21	2 27E+01	
	013	53 4	-40 9	5/10/2010	16 31	3 45E+C2	1 58E+C2	1 41E+02	-9 07:-02	4 95E-0:	6 32E-01	8 10E-01	7 58E+00	8 81E−00	-2 08E+00	8 42E+00	9 02E+00	-5 02E+00	2 07E+21	2 40E+01	
	014	53 4	-40 9	8/16/2010	15 34	2 58E+C2	1 50E+C2	1 50E+02	-2 84:-02	4 87E-0:	6 34E-01	-8 42E+00	7 52E+00	7 70E−00	-2 64E+00	5 03E+00	6 02E+00	-8 48E+00	: 96E+21	2 37E+01	
	015	53 4	-40 9	1:/18/2C10	12 22	2 49E+C2	1 03E+C2	3 96E+02	-4 50:-01	4 20E-0:	1 32E+00	4 54E-01	4 11E+00	9 15E−00	2 23E−00	3 57E+00	8 75E+00	: 10E+01	8 92E+20	1 96E+01	
MW-60-72	001	72 4	-59 9	5/8/20C7	12 17	-5 26E+00	1 52E+C2	1 82E+02	2 07E-0:	8 13E-0:	9 71E-01	1 61E+00	4 72E+00	3 33E−00	9 40E-01	3 21E+00	3 82E+00	3 28E-21	: 69E+21	1 97E+01	MW-60-72
	002	72 4	-59 9	7/27/2007	13 22	1 10E+C2	1 64E+C2	1 31E+02	-3 27:-01	4 92E-0:	5 76E-01	4 79E-01	3 56E100	4 51E 00	-1 10E100	3 94E100	4 17E100	NA	NA	NA	
	003	72 4	-59 9	1/9/2007	14 15	1 24E+C2	1 43E+C2	1 54E+02	1 64E-0:	6 30E-0:	7 12E-01	7 40E-01	3 70E+00	4 27E 00	6 12E-01	3 72E+00	4 33E+00	NA	NA	NA	
	004	72 4	-59 9	1/14/2008	14 12	1 36E+C2	1 65E+C2	1 78E+02	1 58E-0:	5 93E-0:	7 23E-01	5 42E-03	3 33E+00	3 56E−00	8 47E-01	2 97E+00	3 54E+00	NA	NA	NA	
	005	72 4	-59 9	4/24/2008	12 20	1 63E+C2	1 17E+C2	1 93E+02	3 08E-0:	4 82E-0:	8 88E-01	-5 55E-0:	2 51E+00	3 92E−00	1 00E-01	2 23E+00	3 73E+00	NA	NA	NA	
	006	72 4	-59 9	7/30/2008	13 25	8 27E+C1	9 69E+C1	1 53E+02	1 73E-0:	1 41E-0:	2 33E-01	-8 79E-0:	2 39E+00	3 91E−00	-1 11E+00	2 47E+00	3 96E+00	NA	NA	NA	
	007	72 4	-59 9	11/5/2008	14 58	1 94E+C2	1 64E+C2	1 78E+02	2 09E-0:	6 54E-0:	7 78E-01	-9 53E-0:	5 68E+00	6 09E−00	-1 43E+00	5 35E+00	5 64E+00	NA	NA	NA	
	008	72 4	-59 9	2/9/20C9	11 25	1 67E+C2	1 55E+C2	1 59E+02	-4 16:-01	7 19E-0:	9 50E-01	-6 54E-0:	3 00E+00	3 30E−00	7 83E-01	3 02E+00	3 69E+00	-9 25E+00	2 24E+21	2 66E+01	
	009	72 4	-59 9	5/5/20C9	10 32	1 57E+C2	1 67E+C2	1 75E+02	6 32E-02	6 56E-0:	7 71E-01	2 59E+00	1 10E+01	7 32E−00	1 75E−00	5 02E+00	7 24E+00	NA	NA	NA	
	010	72 4	-59 9	8/11/2009	10 40	1 73E+C2	1 55E+C2	1 59E+02	6 31E-02	5 38E-0:	6 30E-01	2 68E+00	3 88E+00	4 62E−00	4 35E−00	5 15E+00	5 86E+00	-2 42E+00	: 76E+21	2 04E+01	
	011	72 4	-59 9	10/30/2009	11 08	1 73E+C2	1 48E+C2	1 51E+02	4 07E-0:	3 89E-0:	4 83E-01	-3 13E+00	5 59E+00	5 96E−00	2 57E−00	7 07E+00	8 35E+00	NA	NA	NA	
	012	72 4	-59 9	2/25/2010	11 31	1 27E+C2	1 58E+C2	1 74E+02	5 98E 02	5 52E 0:	7 80E 01	6 93E+00	8 12E+00	7 73E−00	1 09E+00	1 88E+00	3 26E+00	1 85E+00	: 94E+21	2 36E+01	
	013	72 4	-59 9	5/10/2010	12 11	3 01E+C2	1 52E+C2	1 40E+02	1 57E-02	5 49E-0:	7 10E-01	-3 66E100	1 29E101	1 50E 01	-7 77E100	1 12E101	1 10E101	-5 97E+00	2 07E+21	2 41E+01	
	014	72 4	-59 9	8/17/2010	11 59	2 33E+C1	1 23E+C2	1 44E+02	1 97E-0:	5 90E-0:	6 91E-01	-5 91E-0:	5 40E+00	6 06E−00	-1 59E+00	3 08E+00	6 57E+00	: 19E+00	2 04E+21	2 37E+01	
	015	72 4	-59 9	1:/16/2C10	13 17	-2 51E+01	1 68E+C2	5 98E+02	5 85E-02	5 15E-0:	1 55E+00	2 12E+00	5 54E+00	1 26E−01	-3 52E+00	5 67E+00	1 00E+01	-1 14E+01	8 54E+20	1 88E+01	
MW-60-135	001	134 5	-122 4	5/8/20C7	12 03	2 54E+C1	1 55E+C2	1 81E+02	3 35E-0:	6 77E-0:	7 74E-01	-1 05E+00	3 50E+00	3 08E−00	1 74E-01	3 12E+00	3 52E+00	4 54E+00	: 77E+21	2 02E+01	MW-60-135
	002	134 5	-122 4	7/27/2007	16 00	3 92E+C2	2 03E+C2	1 81E+02	-2 13:-01	3 29E-0:	4 59E-01	2 78E-02	2 70E+00	3 07E−00	1 78E-01	2 63E+00	3 04E+00	NA	NA	NA	
	003	134 5	-122 4	1/9/2007	14 20	5 20E+C2	1 83E+C2	1 50E+02	-2 59:-01	4 46E-0:	6 31E-01	-1 55E+00	3 40E+00	3 52E−00	-8 88E-02	3 57E+00	3 94E+00	NA	NA	NA	
	004	134 5	-122 4	1/14/2008	14 19	3 79E+C2	1 89E+C2	1 74E+02	-1 70:-01	6 17E-0:	8 52E-01	-1 33E+00	3 14E+00	3 25E−00	4 22E-01	3 17E+00	3 59E+00	NA	NA	NA	
	005	134 5	-122 4	4/24/2008	12 31	5 85E+C2	1 33E+C2	1 93E+02	-1 98:-02	3 17E-0:	6 59E-01	1 16E+00	2 24E+00	3 93E−00	-1 70E+00	2 67E+00	3 93E+00	NA	NA	NA	
	006	134 5	-122 4	7/30/2008	13 33	4 91E+C2	1 42E+C2	1 91E+02	1 70E-0:	3 44E-0:	6 18E-01	-4 58E-0:	1 79E+00	2 88E−00	1 43E−00	2 01E+00	3 67E+00	NA	NA	NA	
	007	134 5	-122 4	11/5/2008	10 49	4 25E+C2	2 01E+C2	1 99E+02	-1 71:-01	5 31E-0:	7 18E-01	-2 18E-02	5 71E+00	6 40E−00	-3 53E+00	5 25E+00	5 99E+00	NA	NA	NA	
	008	134 5	-122 4	2/9/20C9	12 04	3 83E+C2	1 67E+C2	1 59E+02	5 52E 0:	5 96E 0:	6 89E 01	1 42E+00	2 96E+00	3 48E−00	4 24E 01	3 05E+00	3 35E+00	3 74E+00	2 27E+21	2 58E+01	
	009	134 5	-122 4	5/5/20C9	10 54	3 17E+C2	1 82E+C2	1 71E+02	-1 77:-01	6 12E-0:	7 45E-01	-3 22E+00	1 31E+01	8 76E−00	3 12E-01	5 81E+00	7 64E+00	NA	NA	NA	
	010	134 5	-122 4	8/11/2009	10 52	3 46E+C2	1 64E+C2	1 59E+02	4 65E-0:	5 88E-0:	6 16E-01	1 76E+00	3 86E+00	4 03E−00	4 56E-01	3 51E+00	3 93E+00	-3 72E+00	: 77E+21	2 07E+01	
	011	134 5	-122 4	10/30/2009	10 55	3 17E+C2	1 55E+C2	1 51E+02	-1 77:-01	5 93E-0:	7 51E-01	1 15E+00	6 03E+00	7 81E−00	-2 52E+00	5 53E+00	6 63E+00	NA	NA	NA	
	012	134 5	-122 4	2/25/2010	11 43	3 14E+C2	1 68E+C2	1 75E+02	1 21E-0:	5 95E-0:	7 32E-01	6 09E-01	4 11E+00	4 72E−00	-5 16E+00	7 23E+00	5 27E+00	-1 29E+00	: 89E+21	2 18E+01	

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	
MW-60-135	013	134 5	-122 4	5/10/2010	12 21	4 18E+02	1 80E+02	1 55E+02	-9 46E-02	6 35E-01	8 55E-01	1 55E+00	7 70E+00	9 03E-00	6 68E-03	8 37E+00	9 36E+00	-8 62E+00	2 04E+01	2 38E+01	MW-60-135
	014	134 5	-122 4	8/17/2010	12 09	1 87E+02	1 39E+02	1 43E+02	-2 74E-01	5 38E-01	7 27E-01	-3 46E+00	8 41E+00	9 07E-00	-1 52E+00	5 33E+00	6 70E+00	3 77E-01	2 11E+01	2 45E+01	
	015	134 5	-122 4	1/16/2C10	13 22	2 41E+02	1 82E+02	3 96E+02	-4 96E-02	7 52E-01	1 88E+00	9 16E-01	5 37E+00	1 20E-01	1 02E-00	4 53E+00	1 03E+01	3 67E-01	8 52E+00	1 96E+01	
MW-60-154	001	154 4	-141 9	5/8/20C7	12 33	4 13E+C1	1 55E+C2	1 30E+02	3 06E-0:	8 13E-0:	9 50E-01	1 97E-01	3 46E+00	3 86E-00	1 45E-00	3 75E+00	4 46E+00	5 52E-01	1 68E+01	1 97E+01	MW-60-154
	002	154 4	-141 9	7/27/2007	16 18	4 62E+C2	2 09E+C2	1 79E+02	-1 53E-01	3 46E-0:	4 09E-01	8 09E-01	4 23E+00	4 60E-00	3 74E-00	2 42E+00	3 80E+00	NA	NA	NA	
	003	154 4	-141 9	1/9/2007	14 23	5 80E+C2	1 88E+C2	1 50E+02	-1 92E-02	4 98E-0:	6 43E-01	-1 63E+00	3 60E+00	3 68E-00	2 70E-01	3 33E+00	3 76E+00	NA	NA	NA	
	004	154 4	-141 9	1/14/2008	12 35	5 59E+C2	2 13E+C2	1 79E+02	1 10E+00	1 17E+00	1 34E+00	1 59E+00	3 64E+00	4 46E-00	2 52E 01	4 35E+00	4 87E+00	NA	NA	NA	
	005	154 4	-141 9	4/24/2008	12 36	4 53E+C2	1 20E+C2	1 24E+02	-2 44E-01	3 65E-0:	7 77E-01	-1 25E+00	2 37E+00	3 69E 00	1 22E 00	2 05E+00	3 79E+00	NA	NA	NA	
	006	154 4	-141 9	7/30/2008	13 35	5 16E+C2	1 44E+C2	1 91E+02	5 10E-0:	2 50E-0:	3 30E-01	-8 80E-0:	2 07E+00	3 58E-00	4 30E-01	1 88E+00	3 25E+00	NA	NA	NA	
	007	154 4	-141 9	11/6/2008	11 19	6 81E+C2	4 16E+C2	3 86E+02	4 42E-0:	6 57E-0:	7 19E-01	2 47E+00	4 56E+00	5 91E-00	5 49E-01	5 87E+00	6 61E+00	NA	NA	NA	
	008	154 4	-141 9	2/9/20C9	12 23	4 15E+C2	1 65E+C2	1 57E+02	4 63E-0:	7 98E-0:	8 96E-01	7 14E-01	3 02E+00	3 45E-00	1 01E-00	3 54E+00	4 13E+00	-3 74E+00	2 09E+01	2 42E+01	
	009	154 4	-141 9	5/5/20C9	11 15	4 39E+C2	2 01E+C2	1 72E+02	7 36E-02	5 70E-0:	6 38E-01	-2 52E-0:	6 89E+00	4 59E-00	-1 47E+00	5 07E+00	5 42E+00	NA	NA	NA	
	010	154 4	-141 9	8/11/2009	11 14	5 13E+C2	1 71E+C2	1 59E+02	-3 52E-01	7 18E-0:	9 59E-01	-3 93E-0:	5 04E+00	5 67E-00	-2 59E+00	5 05E+00	5 34E+00	1 97E+00	1 80E+01	2 08E+01	
	011	154 4	-141 9	10/30/2C09	10 56	4 09E+C2	1 59E+C2	1 51E+02	4 48E-0:	8 40E-0:	9 50E-01	1 34E+01	7 70E+00	6 69E-00	-1 32E-01	5 27E+00	7 01E+00	NA	NA	NA	
	012	154 4	-141 9	2/25/2010	11 45	3 78E+C2	1 71E+C2	1 74E+02	1 97E-0:	6 53E-0:	7 90E-01	1 32E+00	4 72E+00	5 42E-00	-4 38E-04	4 85E+00	5 45E+00	-1 32E+01	1 84E+01	2 19E+01	
	013	154 4	-141 9	5/10/2010	12 32	4 38E+C2	1 85E+C2	1 59E+02	3 42E-0:	6 35E-0:	7 31E-01	-1 33E+00	8 40E+00	9 22E-00	1 61E-01	7 65E+00	8 67E+00	-5 15E+00	2 15E+01	2 46E+01	
	014	154 4	-141 9	8/17/2010	12 18	2 93E+C2	1 50E+C2	1 45E+02	-2 33E-01	5 20E-0:	6 51E-01	-4 41E-0:	6 04E+00	6 67E-00	1 95E+00	5 73E+00	8 02E+00	-1 16E+00	2 13E+01	2 48E+01	
	015	154 4	-141 9	1/16/2C10	13 40	4 62E+C2	1 94E+C2	3 78E+02	3 29E 0:	8 30E 0:	1 94E+00	5 28E+00	1 02E+00	7 52E-00	2 29E 01	5 03E+00	1 11E+01	1 54E+00	2 92E+00	1 78E+01	
MW-60-176	001	175 5	-163 4	5/8/20C7	15 16	5 30E+C2	2 01E+C2	1 80E+02	6 88E-02	5 50E-0:	7 29E-01	3 49E-01	4 54E+00	4 38E-00	1 14E-00	3 92E+00	3 98E+00	7 69E+00	1 73E+01	1 90E+01	MW-60-176
	002	175 5	-163 4	7/27/2007	17 35	8 49E+C2	2 49E+C2	1 78E+02	-4 60E-01	5 84E-0:	7 37E-01	2 00E+00	3 29E+00	4 00E-00	-1 76E+00	3 15E+00	3 03E+00	NA	NA	NA	
	003	175 5	-163 4	1/9/2007	14 57	7 02E+C2	2 01E+C2	1 53E+02	-5 95E-02	5 11E-0:	6 54E-01	-2 58E-0:	2 63E+00	2 85E-00	5 51E-01	2 71E+00	3 09E+00	NA	NA	NA	
	004	175 5	-163 4	1/14/2008	12 25	6 68E+C2	2 25E+C2	1 83E+02	-7 68E-02	7 89E-0:	1 04E+00	2 22E-01	3 59E+00	4 52E-00	5 49E-01	3 54E+00	4 09E+00	NA	NA	NA	
	005	175 5	-163 4	4/24/2008	13 10	7 77E+C2	2 04E+C2	2 73E+02	2 68E-0:	4 91E-0:	8 54E-01	-1 81E+00	2 70E+00	4 00E-00	-9 94E-01	2 53E+00	3 95E+00	NA	NA	NA	
	006	175 5	-163 4	7/30/2008	14 08	8 95E+C2	1 67E+C2	1 91E+02	-2 08E-02	2 96E-0:	5 38E-01	-3 15E-0:	2 12E+00	3 44E-00	-2 05E-01	2 03E+00	3 34E+00	NA	NA	NA	
	007	175 5	-163 4	11/6/2008	11 55	8 32E+C2	4 35E+C2	3 86E+02	2 17E-0:	4 71E-0:	5 45E-01	-2 63E+00	5 09E+00	5 07E-00	-1 06E-01	5 65E+00	6 33E+00	NA	NA	NA	
	008	175 5	-163 4	2/9/20C9	13 08	9 16E+C2	1 91E+C2	1 70E+02	4 25E-0:	6 80E-0:	7 58E-01	-2 42E-0:	3 27E+00	3 56E-00	5 10E-01	3 22E+00	3 74E+00	-1 22E+01	2 06E+01	2 44E+01	
	009	175 5	-163 4	5/5/20C9	11 18	1 04E+C3	2 64E+C2	1 72E+02	2 40E-0:	6 30E-0:	6 30E-01	-4 10E+00	8 45E+00	5 63E-00	1 23E-00	5 63E+00	6 59E+00	NA	NA	NA	
	010	175 5	-163 4	8/11/2009	11 49	1 03E+C3	1 94E+C2	1 59E+02	2 36E 02	3 44E 0:	4 53E 01	1 75E+00	4 64E+00	5 71E-00	2 25E-00	4 83E+00	5 91E+00	2 65E+00	1 77E+01	2 07E+01	
	011	175 5	-163 4	10/30/2C09	11 26	1 02E+C3	1 03E+C2	1 51E+02	-2 27E-01	4 60E-0:	6 27E-01	8 50E-01	5 25E+00	5 95E 00	2 31E 00	5 37E+00	6 52E+00	NA	NA	NA	
	012	175 5	-163 4	2/25/2010	12 24	9 90E+C2	2 01E+C2	1 74E+02	7 56E-02	3 36E-0:	4 10E-01	2 82E+00	6 03E+00	6 92E-00	-3 93E-01	7 93E+00	7 20E+00	-1 79E+00	1 99E+01	2 30E+01	
	013	175 5	-163 4	5/10/2010	13 29	9 93E+C2	2 24E+C2	1 53E+02	-5 05E-01	4 52E-0:	6 99E-01	-5 56E-0:	8 15E+00	9 07E-00	9 52E-01	8 23E+00	9 76E+00	0 00E+00	2 04E+01	2 44E+01	
	014	175 5	-163 4	8/17/2010	12 51	8 13E+C2	1 91E+C2	1 44E+02	-6 59E-01	6 48E-0:	9 31E-01	1 23E-01	6 43E+00	7 32E-00	1 35E-00	5 83E+00	6 97E+00	0 00E+00	2 15E+01	2 48E+01	
	015	175 5	-163 4	1/16/2C10	14 06	8 33E+C2	2 10E+C2	3 97E+02	9 07E-0:	9 42E-0:	2 10E+00	-1 97E+00	4 38E+00	9 04E-00	2 85E-00	4 73E+00	1 12E+01	-5 40E+00	7 91E+00	1 78E+01	
MW-62-18	001	13 5	1 2	5/17/2007	13 10	4 52E+C2	1 83E+C2	1 55E+02	2 98E-02	5 53E-0:	7 27E-01	-5 10E-0:	2 61E+00	2 89E-00	1 00E-01	2 72E+00	3 19E+00	4 61E+00	1 52E+01	1 74E+01	MW-62-18
	002	13 5	1 2	7/26/2007	15 45	5 08E+C2	2 13E+C2	1 78E+02	4 68E-0:	4 93E-0:	5 35E-01	9 04E-01	3 75E+00	4 35E-00	-2 80E+00	4 83E+00	5 80E+00	NA	NA	NA	
	003	13 5	1 2	10/10/2C07	13 50	3 76E+C2	1 73E+C2	1 55E+02	1 30E+00	6 57E-0:	4 37E-01	0 00E+00	3 39E+00	1 87E-00	-7 74E-02	1 71E+00	1 92E+00	NA	NA	NA	
	004	13 5	1 2	1/31/2008	15 15	3 50E+C2	1 34E+C2	1 34E+02	4 95E-0:	7 55E-0:	8 27E-01	1 18E+00	4 23E+00	4 46E-00	5 24E-01	3 33E+00	3 96E+00	NA	NA	NA	
	006	13 5	1 2	8/6/2008	12 55	2 69E+C2	1 41E+C2	2 25E+02	5 31E-0:	3 30E-0:	4 39E-01	9 69E-02	1 67E+00	2 82E-00	-1 26E-01	1 99E+00	3 33E+00	NA	NA	NA	
	007	13 5	1 2	10/29/2C08	13 20	4 00E+C2	1 65E+C2	1 56E+02	5 23E-0:	6 33E-0:	6 37E-01	-3 30E-02	5 10E+00	5 60E 00	-3 51E+00	5 25E+00	4 70E+00	NA	NA	NA	
	008	13 5	1 2	1/23/2009	11 55	4 64E+C2	1 39E+C2	1 07E+02	1 29E+00	6 47E-0:	6 30E-01	9 80E-01	2 55E+00	3 06E 00	-3 42E-01	2 43E+00	2 74E+00	NA	NA	NA	
	009	13 5	1 2	4/15/2009	13 18	4 56E+C2	1 85E+C2	1 36E+02	1 76E-0:	5 99E-0:	7 14E-01	-3 54E-0:	5 81E+00	3 87E-00	1 91E+00	3 29E+00	4 20E+00	-1 88E+00	1 86E+01	2 17E+01	
	010	13 5	1 2	7/22/2009	14 24	2 86E+C2	2 16E+C2	2 29E+02	1 04E-0:	6 42E-0:	7 34E-01	-8 49E-0:	2 54E+00	3 08E-00	-2 10E+00	3 63E+00	3 28E+00	NA	NA	NA	
	011	13 5	1 2	1/12/2C09	15 36	2 83E+C2	1 13E+C2	1 25E+02	3 30E-0:	7 25E-0:	8 34E-01	-1 34E+00	6 40E+00	5 80E-00	-4 63E+00	7 23E+00	6 68E+00	NA	NA	NA	
	012	13 5	1 2	2/9/2010	15 19	2 87E+C2	1 88E+C2	1 98E+02	5 26E-0:	6 40E-0:	6 54E-01	-1 57E+00	5 57E+00	6 19E-00	-2 50E+00	7 82E+00	7 61E+00	NA	NA	NA	
	013	13 5	1 2	4/13/2010	15 17	2 04E+C2	1 34E+C2	1 42E+02	2 74E-02	6 16E-0:	7 77E-01	-1 48E+00	4 05E+00	4 37E-00	6 69E-01	5 33E+00	4 96E+00	NA	NA	NA	
	014	13 5	1 2	8/3/2010	13 00	1 14E+C2	1 32E+C2	1 44E+02	6 60E-0:	6 55E-0:	6 30E-01	3 08E+00	8 40E+00	1 03E-01	5 07E-00	1 02E+01	1 32E+01	NA	NA	NA	
	015	13 5	1 2	11/9/2010	11 57	7 48E+C1	1 71E+C2	3 86E+02	-1 05E-02	6 10E-0:	1 54E+00	2 87E+00	4 59E+00	1 07E-01	-6 86E-01	4 79E+00	1 01E+01	NA	NA	NA	
MW-62-37	001	34 5	-19 8	5/17/2007	11 10	2 97E+C2	1 70E+C2	1 59E+02	3 30E-0:	8 78E-0:	9 56E-01	9 81E-01	2 00E+00	2 37E-00	-1 12E+00	2 75E+00	3 31E+00	1 01E+01	1 81E+01	2 04E+01	MW-62-37
	002	34 5	19 8	7/26/2007	15 35	2 50E+C2	1 79E+C2	1 75E+02	2 57E 01	4 14E 0:	5 18E 01	6 88E 02	2 64E+00	2 94E-00	1 23E 01	2 63E+00	2 81E+00	NA	NA	NA	
	003	34 5	-19 8	10/10/2C07	14 50	3 02E+C2	1 50E+C2	1 47E+02	-1 67E-01	4 44E-0:	6 10E-01	2 12E-01	1 61E+00	2 02E 00	-7 67E-01	1 74E+00	1 03E+00	NA	NA	NA	
	004	34 5	-19 8	1/10/2008	13 55	3 97E+C2	1 68E+C2	1 71E+02	1 34E-0:	6 05E-0:	7 24E-01	8 30E-01	4 43E+00	4 02E-00	-2 10E-01	3 87E+00	4 19E+00	NA	NA	NA	
	006	34 5	-19 8	8/6/2008	12 00	5 94E+C2	1 19E+C2	1 45E+02	2 25E-0:	2 59E-0:	4 34E-01	-2 55E+00	1 12E+00	2 06E-00	-1 88E+00	1 55E+00	2 58E+00	NA	NA	NA	
	007	34 5	-19 8	10/29/2C08	13 57	5 35E+C2	1 71E+C2	1 56E+02	1 36E+00	6 57E-0:	5 24E-01	4 20E-01	4 77E+00	5 33E-00	-2 20E+00	5 12E+00	5 20E+00	NA	NA	NA	
	008	34 5	-19 8	1/23/2009	12 20	4 87E+C2	1 42E+C2	1 38E+02	1 28E-0:	7 41E-0:	9 02E-01	-7 59E-0:	3 12E+00	3 43E-00	-6 49E-01	3 14E+00	3 36E+00	NA	NA	NA	
	009	34 5	-19 8	4/15/2009	13 13	4 39E+C2	1 02E+C2	1 35E+02	-3 16E-01	6 58E-0:	8 49E-01	-1 73E-0:	5 54E+00	3 96E-00	-6 46E-01	4 44E+00	4 81E+00	-1 65E+01	1 74E+01	2 14E+01	
	010	34 5	-19 8	7/22/2009	16 02	2 82E+C2	2 22E+C2	2 30E+02	-3 68E-01	6 77E-0:	8 31E-01	-1 79E+00	3 66E+00	3 82E-00	-1 61E+00	3 55E+00	3 57E+00	NA	NA	NA	
	011	34 5	-19 8	1/12/2C09	15 27	2 17E+C2	1 07E+C2	1 05E+02	-3 41E-01	7 25E-0:	8 58E-01	-8 33E+00	1 00E+01	1 01E-01	-1 08E+00	7 15E+00	7 72E+00	NA	NA	NA	
	012	34 5	-19 8	2/9/2010	15 40	3 93E+C2	1 95E+C2	1 98E+02	-1 80E-01	4 98E-0:	6 56E-01	-2 99E+00	4 66E+00	4 83E-00	-2 54E-01	5 97E+00	6 51E+00	NA	NA	NA	
	013	34 5	-19 8	4/13/2010	15 22	2 59E+C2	2 07E+C2	2 26E+02	5 46E-0:	7 33E-0:	7 31E-01	-2 42E+00	3 66E+00	4 07E-00	1 34E-00	4 04E+00	4 80E+00	NA	NA	NA	
	014	34 5	19 8	8/3/2010	12 52	1 91E+C2	1 43E+C2	1 47E+02	1 52E 02	5 47E 0:	6 85E 01	9 59E 0:	8 78E+00	9 70E-00	5 33E+00	2 12E+00	7 92E+00	NA	NA	NA	
	015	34 5	-19 8	11/9/2010	11 56	6 09E+C1	1 70E+C2	3 85E+02	7 02E-0:	6 59E-0:	1 47E+00	-8 44E-02	4 49E+00	9 91E-00	3 83E+00	4 28E+00	1 07E+01	NA	NA	NA	
MW-62-53	001	53 1	-40 3	5/10/2007	15 00	3 93E+C2	1 91E+C2	1 72E+02	4 41E-0:	7 97E-0:	8 96E-01	6 50E-01	3 40E+00	3 86E-00	-9 12E-01	3 52E+00	3 74E+00	-5 00E+00	1 40E+01	1 68E+01	MW-62-53
	002	53 1	-40 3	7/26/2007	15 34	5 45E+C2	1 94E+C2	1 78E+02	3 56E-0:	6 98E-0:	7 85E-01	0 00E+00	4 62E+00	2 55E-00	-8 44E-01	2 77E+00	2 45E+00	NA	NA	NA	
	003	53 1	-40 3	1/10/2008	15 37	3 48E+C2	1 67E+C2	1 71E+02	4 45E-02	6 72E-0:	8 15E-01	-7 91E-0:	2 75E+00	2 93E-00	7 68E-01	2 88E+00	3 43E+00	NA	NA	NA	

See Page 32 for Notes

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	
MW-62-53	005	53.1	-40.3	8/6/2008	12:35	3.52E+02	1.54E+02	2.41E+02	9.52E-03	2.54E-01	4.95E-01	1.38E+00	2.24E+00	3.98E-00	3.02E-01	2.33E+00	3.87E+00	NA	NA	NA	MW-62-53
	006	53.1	-40.3	10/29/2008	13:51	4.08E+02	1.67E+02	1.57E+02	6.63E-02	3.87E-01	4.34E-01	-3.99E-01	5.65E+00	6.51E-00	-2.67E+00	8.09E+00	7.19E+00	NA	NA	NA	
	007	53.1	-40.3	1/23/2009	12:44	3.56E+02	2.16E+02	2.38E+02	4.53E-01	7.58E-01	8.50E-01	2.27E-01	3.30E+00	3.77E-00	-1.27E+00	3.56E+00	3.71E+00	NA	NA	NA	
	008	53.1	-40.3	4/15/2009	13:29	4.33E+02	1.82E+02	1.36E+02	-5.89E-01	6.55E-01	9.39E-01	-4.92E-01	5.30E+00	3.53E-00	2.83E-01	2.82E+00	3.31E+00	-5.14E+00	1.79E+01	2.12E+01	
	009	53.1	-40.3	7/22/2009	14:01	2.40E+02	2.21E+02	2.33E+02	7.09E-01	7.95E-01	8.34E-01	3.00E-02	3.13E+00	3.55E-00	3.78E-01	3.24E+00	3.73E+00	NA	NA	NA	
	010	53.1	-40.3	11/17/2009	13:38	2.81E+02	1.09E+02	1.31E+02	3.54E-01	6.45E-01	7.77E-01	2.51E-01	2.88E+00	3.37E-00	-6.92E-01	3.25E+00	3.91E+00	NA	NA	NA	
	011	53.1	-40.3	2/9/2010	14:00	3.46E+02	1.92E+02	1.90E+02	1.50E-01	4.35E-01	6.51E-01	9.19E-01	5.67E+00	6.39E-00	1.34E-00	5.05E+00	7.13E+00	NA	NA	NA	
	012	53.1	-40.3	4/13/2010	15:27	3.25E+02	1.44E+02	1.47E+02	-1.04E-02	5.67E-01	7.67E-01	1.33E+00	3.25E+00	3.07E-00	-1.52E+00	5.03E+00	4.08E+00	NA	NA	NA	
	013	53.1	-40.3	8/3/2010	12:20	1.59E+02	1.40E+02	1.47E+02	3.13E-01	5.51E-01	6.32E-01	2.99E+00	1.11E+01	1.33E-01	2.39E-01	7.15E+00	8.24E+00	NA	NA	NA	
	014	53.1	-40.3	11/9/2010	12:49	2.05E+02	1.77E+02	3.88E+02	8.82E-02	6.79E-01	1.39E+00	-4.23E+00	4.83E+00	9.52E-00	-2.68E+00	5.23E+00	1.04E+01	NA	NA	NA	
MW-62-71	001	71.1	-58.3	5/10/2007	11:35	5.02E+02	2.00E+02	1.71E+02	6.16E-01	8.34E-01	8.92E-01	-8.78E-01	3.51E+00	3.75E-00	1.37E-01	3.21E+00	3.59E+00	4.95E+00	1.29E+01	1.48E+01	MW-62-71
	002	71.1	-58.3	7/26/2007	12:20	1.51E+02	1.65E+02	1.74E+02	2.15E-01	7.26E-01	8.29E-01	1.11E+00	3.36E+00	3.91E-00	-2.39E-01	3.48E+00	3.90E+00	NA	NA	NA	
	003	71.1	-58.3	10/10/2007	12:23	2.69E+02	1.61E+02	1.55E+02	1.15E-01	5.22E-01	6.30E-01	1.18E+00	2.43E+00	2.45E-00	1.54E+00	2.10E+00	2.55E+00	NA	NA	NA	
	004	71.1	-58.3	1/10/2008	14:04	3.53E+02	1.89E+02	1.94E+02	3.78E-01	5.85E-01	6.46E-01	-7.82E-01	2.51E+00	2.72E-00	3.78E-02	2.22E+00	2.55E+00	NA	NA	NA	
	006	71.1	-58.3	8/6/2008	11:42	4.64E+02	1.66E+02	2.53E+02	3.31E-01	2.50E-01	3.94E-01	5.85E-01	2.01E+00	3.53E-00	-4.96E-01	2.23E+00	3.66E+00	NA	NA	NA	
	007	71.1	-58.3	10/29/2008	12:00	5.12E+02	1.70E+02	1.56E+02	3.70E-01	4.81E-01	5.13E-01	-9.14E+00	5.67E+00	6.47E-00	-1.31E+00	5.45E+00	7.00E+00	NA	NA	NA	
	008	71.1	-58.3	1/23/2009	12:12	2.99E+02	2.07E+02	2.34E+02	2.47E-01	7.35E-01	8.56E-01	1.92E+00	3.53E+00	4.25E-00	-4.84E-01	3.97E+00	4.22E+00	NA	NA	NA	
	009	71.1	58.3	4/15/2009	12:06	4.78E+02	1.89E+02	1.38E+02	2.78E-01	6.38E-01	7.30E-01	1.27E+00	6.32E+00	4.21E-00	1.21E-00	3.43E+00	4.20E+00	3.19E+00	1.88E+01	2.20E+01	
	010	71.1	-58.3	7/22/2009	12:52	3.32E+02	2.31E+02	2.32E+02	5.54E-01	7.87E-01	8.39E-01	-1.08E+00	3.40E+00	3.75E-00	8.91E-01	3.88E+00	4.50E+00	NA	NA	NA	
	011	71.1	-58.3	11/12/2009	12:40	4.68E+02	1.24E+02	1.22E+02	3.02E-01	6.56E-01	7.57E-01	2.55E+00	5.28E+00	6.35E-00	-1.57E+00	5.35E+00	6.71E+00	NA	NA	NA	
	012	71.1	-58.3	2/9/2010	13:20	4.56E+02	2.00E+02	1.99E+02	4.07E-01	4.74E-01	4.89E-01	4.29E+00	5.40E+00	6.66E-00	-2.86E+00	5.37E+00	5.09E+00	NA	NA	NA	
	013	71.1	-58.3	4/13/2010	13:45	3.77E+02	2.16E+02	2.30E+02	-2.24E-01	5.54E-01	8.12E-01	-6.51E-01	4.44E+00	4.86E-00	-3.24E+00	5.89E+00	4.62E+00	NA	NA	NA	
	014	71.1	-58.3	8/3/2010	11:30	3.25E+02	1.70E+02	1.77E+02	2.44E-01	3.75E-01	4.12E-01	-2.03E+00	8.37E+00	8.99E-00	1.85E-00	9.87E+00	1.16E+01	NA	NA	NA	
	015	71.1	-58.3	11/9/2010	11:02	4.17E+02	1.83E+02	3.82E+02	-6.74E-02	6.92E-01	1.52E+00	-6.58E-01	3.50E+00	8.41E-00	-4.59E+00	5.63E+00	1.09E+01	NA	NA	NA	
MW-62-92	001	91.6	-78.8	5/10/2007	11:18	7.00E+02	2.16E+02	1.58E+02	7.11E-01	9.21E-01	9.35E-01	-1.58E+00	4.63E+00	3.30E-00	7.45E-01	3.12E+00	3.72E+00	-7.73E+00	1.30E+01	1.65E+01	MW-62-92
	002	91.6	-78.8	7/26/2007	12:35	4.37E+02	2.07E+02	1.80E+02	-2.28E-02	3.39E-01	3.94E-01	6.50E-01	3.15E+00	3.63E-00	8.32E-01	3.33E+00	3.95E+00	NA	NA	NA	
	003	91.6	-78.8	10/10/2007	12:15	4.28E+02	1.73E+02	1.50E+02	-1.91E-01	4.77E-01	6.54E-01	6.23E-01	1.88E+00	2.01E-00	1.85E-00	1.83E+00	2.71E+00	NA	NA	NA	
	004	91.6	-78.8	1/10/2008	11:09	3.94E+02	1.92E+02	1.94E+02	1.38E-01	6.59E-01	7.90E-01	3.75E-01	2.54E+00	3.39E-00	9.37E-01	3.47E+00	3.62E+00	NA	NA	NA	
	006	91.6	-78.8	8/6/2008	11:49	4.05E+02	1.59E+02	2.30E+02	2.43E-01	3.29E-01	5.54E-01	1.51E+00	2.29E+00	4.11E-00	5.15E-00	2.52E+00	5.35E+00	NA	NA	NA	
	007	91.6	-78.8	10/29/2008	12:10	4.82E+02	1.68E+02	1.56E+02	-4.32E-02	5.40E-01	7.12E-01	1.64E+00	6.57E+00	7.61E-00	2.71E-00	5.33E+00	7.68E+00	NA	NA	NA	
	008	91.6	-78.8	1/23/2009	12:28	5.25E+02	2.33E+02	2.35E+02	-1.59E-01	6.86E-01	8.75E-01	2.90E-01	4.88E+00	4.88E-00	1.88E-00	5.88E+00	4.74E+00	NA	NA	NA	
	009	91.6	-78.8	4/15/2009	12:15	6.08E+02	2.06E+02	1.38E+02	1.09E-01	5.42E-01	6.50E-01	3.15E-01	6.21E+00	4.14E-00	-9.11E-01	3.35E+00	3.56E+00	-1.23E+01	1.83E+01	2.22E+01	
	010	91.6	-78.8	7/22/2009	11:37	2.80E+02	2.24E+02	2.32E+02	3.44E-02	6.37E-01	8.10E-01	8.43E-01	3.39E+00	3.96E-00	-9.42E-01	3.43E+00	3.57E+00	NA	NA	NA	
	011	91.6	-78.8	11/12/2009	12:43	4.83E+02	1.25E+02	1.22E+02	3.91E-01	7.75E-01	8.76E-01	6.13E-01	5.25E+00	5.91E-00	2.98E-01	5.23E+00	5.86E+00	NA	NA	NA	
	012	91.6	-78.8	2/9/2010	13:20	5.27E+02	2.03E+02	1.98E+02	4.06E-01	6.20E-01	6.33E-01	-2.81E+00	7.35E+00	6.45E-00	2.57E-00	5.53E+00	7.81E+00	NA	NA	NA	
	013	91.6	-78.8	4/13/2010	13:38	5.96E+02	1.55E+02	1.44E+02	1.77E-01	6.88E-01	8.34E-01	1.16E+00	3.72E+00	4.24E-00	7.23E-03	3.75E+00	4.13E+00	NA	NA	NA	
	014	91.6	-78.8	8/3/2010	11:32	3.13E+02	1.68E+02	1.76E+02	4.11E-01	5.37E-01	5.30E-01	-3.42E+00	8.13E+00	8.38E-00	-4.99E-01	7.59E+00	8.36E+00	NA	NA	NA	
	015	91.6	-78.8	11/9/2010	11:15	4.82E+02	1.88E+02	3.86E+02	-9.75E-01	7.72E-01	1.95E+00	-2.96E+00	5.42E+00	1.17E-01	1.77E-00	4.84E+00	1.12E+01	NA	NA	NA	
MW-62-130	001	130.1	-125.3	5/10/2007	10:22	4.55E+02	1.90E+02	1.74E+02	0.12E-01	0.16E-01	0.30E-01	1.73E+00	4.17E+00	3.28E-00	-1.40E+00	3.42E+00	3.55E+00	-4.93E+00	1.32E+01	1.64E+01	MW-62-130
	002	130.1	-125.3	7/26/2007	15:55	5.30E+02	2.19E+02	1.32E+02	5.26E-01	5.79E-01	6.39E-01	6.60E-02	3.51E+00	3.90E-00	6.39E-01	3.93E+00	4.54E+00	NA	NA	NA	
	003	138.1	-125.3	10/10/2007	14:46	7.78E+02	2.09E+02	1.54E+02	8.37E-01	8.30E-01	8.39E-01	0.00E+00	2.67E+00	2.90E-00	-1.19E+00	2.44E+00	2.50E+00	NA	NA	NA	
	004	138.1	-125.3	1/10/2008	10:05	7.69E+02	1.82E+02	1.74E+02	7.54E-01	7.42E-01	7.52E-01	4.30E-01	3.56E+00	3.88E-00	1.03E-01	3.47E+00	3.97E+00	NA	NA	NA	
	006	138.1	-125.3	8/6/2008	11:41	5.33E+02	1.55E+02	2.28E+02	1.21E+00	4.18E-01	5.31E-01	8.24E-01	2.44E+00	4.27E-00	3.85E-01	2.41E+00	4.20E+00	NA	NA	NA	
	007	138.1	-125.3	10/29/2008	12:25	7.50E+02	1.82E+02	1.56E+02	1.24E+00	5.53E-01	3.58E-01	1.40E+00	6.06E+00	7.05E-00	2.04E-00	8.23E+00	8.60E+00	NA	NA	NA	
	008	138.1	-125.3	1/23/2009	12:50	6.26E+02	2.43E+02	2.24E+02	2.46E+00	8.27E-01	6.23E-01	-4.23E-01	2.40E+00	2.67E-00	5.59E-01	2.24E+00	2.64E+00	NA	NA	NA	
	009	138.1	-125.3	4/15/2009	12:38	7.72E+02	2.18E+02	1.32E+02	1.78E+00	8.70E-01	7.93E-01	-7.43E-01	6.18E+00	4.12E-00	4.95E-01	3.23E+00	3.73E+00	1.23E+00	1.83E+01	2.12E+01	
	010	138.1	-125.3	7/22/2009	16:55	6.31E+02	2.54E+02	2.29E+02	1.31E+00	7.83E-01	7.15E-01	1.86E+00	3.81E+00	4.50E-00	3.36E-01	3.63E+00	4.18E+00	NA	NA	NA	
	011	138.1	-125.3	11/17/2009	15:11	5.76E+02	1.35E+02	1.37E+02	2.33E+00	7.98E-01	4.87E-01	1.05E+00	7.47E+00	8.36E-00	7.74E-02	7.97E+00	8.71E+00	NA	NA	NA	
	012	138.1	-125.3	2/9/2010	15:54	7.81E+02	2.18E+02	1.99E+02	8.78E-01	6.50E-01	6.34E-01	2.22E+00	5.63E+00	6.09E-00	3.56E+00	4.79E+00	1.02E+00	NA	NA	NA	
	013	138.1	-125.3	4/13/2010	10:02	6.54E+02	1.59E+02	1.46E+02	1.20E+00	7.41E-01	6.91E-01	-7.33E-01	6.39E+00	5.90E-00	-2.36E+00	5.71E+00	5.03E+00	NA	NA	NA	
	014	138.1	-125.3	8/3/2010	14:09	5.91E+02	1.82E+02	1.76E+02	1.47E+00	7.40E-01	6.36E-01	3.83E+00	7.26E+00	8.93E-00	-1.73E+00	7.30E+00	7.39E+00	NA	NA	NA	
	015	138.1	-125.3	11/9/2010	14:31	5.81E+02	2.07E+02	4.46E+02	-1.05E-01	6.18E-01	1.37E+00	-1.42E+00	4.14E+00	8.57E-00	2.51E-00	4.63E+00	1.12E+01	NA	NA	NA	
MW-62-182	001	182.1	-169.3	5/10/2007	10:43	5.41E+02	2.09E+02	1.76E+02	1.22E-01	7.18E-01	8.90E-01	3.74E-02	3.50E+00	3.33E-00	-2.40E-01	3.23E+00	3.53E+00	-1.76E+00	1.24E+01	1.50E+01	MW-62-182
	002	182.1	-169.3	7/26/2007	16:20	4.17E+02	2.06E+02	1.82E+02	-9.56E-02	2.73E-01	3.26E-01	-1.16E+00	3.10E+00	3.25E-00	6.21E-01	2.73E+00	3.15E+00	NA	NA	NA	
	003	182.1	-169.3	10/10/2007	14:42	4.94E+02	1.83E+02	1.54E+02	-1.40E-01	4.40E-01	5.99E-01	6.04E-01	1.51E+00	1.91E-00	5.45E-01	1.92E+00	2.23E+00	NA	NA	NA	
	004	182.1	-169.3	1/10/2008	11:15	4.70E+02	1.68E+02	1.71E+02	8.15E-02	5.13E-01	6.33E-01	-1.17E-01	2.56E+00	2.99E-00	9.22E-01	1.31E+00	2.33E+00	NA	NA	NA	
	006	182.1	-169.3	8/6/2008	13:54	3.99E+02	1.52E+02	2.34E+02	5.30E-02	3.33E-01	6.16E-01	8.48E-01	2.19E+00	3.85E-00	-2.67E-01	2.42E+00	3.97E+00	NA	NA	NA	
	007	182.1	-169.3	10/29/2008	15:52	4.98E+02	1.70E+02	1.56E+02	4.40E-02	7.13E-01	9.16E-01	1.60E+00	6.51E+00	6.97E-00	2.99E-01	5.87E+00	6.54E+00	NA	NA	NA	
	008	182.1	-169.3	1/23/2009	13:49	4.98E+02	2.28E+02	2.33E+02	1.85E-01	4.56E-01	6.38E-01	-1.91E+00	2.55E+00	2.68E-00	-1.63E+00	2.43E+00	2.55E+00	NA	NA	NA	
	009	182.1	169.3	4/15/2009	14:53	7.36E+02	2.21E+02	1.37E+02	6.26E-01	7.43E-01	9.16E-01	2.06E-01	6.32E+00	4.21E-00	2.09E-01	4.55E+00	5.11E+00	5.59E+00	1.83E+01	2.17E+01	
	010	182.1	-169.3	7/22/2009	17:00	4.66E+02	2.43E+02	2.33E+02	2.73E-01	8.22E-01	9.71E-01	5.02E-01	2.50E+00	3.47E-00	-9.12E-01	2.73E+00	2.70E+00	NA	NA	NA	
	011	182.1	-169.3	11/12/2009	15:15	5.10E+02	1.27E+02	1.23E+02	1.23E-01	5.44E-01	6.32E-01	-3.06E+00	7.60E+00	8.09E-00	2.77E-00	8.03E+00	7.53E+00	NA	NA	NA	
	012	182.1	-169.3	2/9/2010	16:07	4.69E+02	2.10E+02	2.10E+02	-2.05E-01	5.12E-01	4.91E-01	9.56E-01	5.40E+00	6.26E-00	-2.02E-01	5.45E+00	6.05E+00	NA	NA	NA	
	013	182.1	-169.3	4/13/2010	18:18	4.77E+02	1.52E+02	1.46E+02	2.86E-01	6.55E-01	7.51E-01	9.81E-01	3.53E+00	4.57E-00	3.69E-01	4.02E+00	4.65E+00	NA	NA	NA	

See Page 32 for Notes

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	
MW-62-182	014	182.1	-169.3	8/3/2010	14:02	2.78E+02	1.65E+02	1.75E+02	2.07E-01	7.25E-01	8.30E-01	-5.53E+00	1.24E+01	1.51E-01	-9.25E-01	8.03E+00	8.64E+00	NA	NA	NA	MW-62-182
	015	182.1	-169.3	11/9/2010	14:43	4.76E+02	1.88E+02	3.87E+02	1.32E+00	6.77E-01	1.46E+00	-2.35E+00	4.16E+00	8.56E-00	1.99E-00	5.25E+00	1.21E+01	NA	NA	NA	
MW-63-18	001	14.9	0.7	5/18/2007	10:35	2.30E+02	1.59E+02	1.57E+02	4.75E-02	5.37E-01	6.95E-01	8.56E-01	2.44E+00	2.67E-00	1.11E-00	2.65E+00	2.74E+00	7.36E+00	1.61E+01	1.82E+01	MW-63-18
	002	14.9	0.7	7/30/2007	13:10	2.00E+02	1.74E+02	1.39E+02	-2.18E-01	3.91E-01	4.58E-01	1.98E+00	2.65E+00	3.03E-00	-1.31E+00	2.53E+00	2.53E+00	NA	NA	NA	
	003	14.9	0.7	10/11/2007	12:43	1.49E+02	1.56E+02	1.71E+02	3.08E-01	6.23E-01	7.12E-01	1.52E+00	2.63E+00	3.16E-00	-1.41E-01	2.52E+00	2.74E+00	NA	NA	NA	
	004	14.9	0.7	1/9/2008	14:55	1.73E+02	1.56E+02	1.73E+02	-6.34E-02	5.55E-01	7.88E-01	2.55E+00	3.99E+00	3.47E-00	1.97E-00	2.94E+00	3.75E+00	NA	NA	NA	
	005	14.9	0.7	4/23/2008	14:50	2.57E+02	1.53E+02	2.13E+02	2.31E-02	4.58E-01	8.52E-01	8.04E-01	2.35E+00	4.03E-00	7.68E-01	2.05E+00	3.69E+00	8.53E+00	1.43E+01	2.42E+01	
	006	14.9	0.7	7/30/2008	11:13	1.79E+02	1.20E+02	1.21E+02	3.20E+00	5.61E-01	4.80E-01	-1.71E-02	1.75E+00	2.97E-00	-1.16E+00	2.04E+00	2.49E+00	NA	NA	NA	
	007	14.9	0.7	11/5/2008	10:53	3.20E+02	1.59E+02	1.55E+02	3.25E-01	6.20E-01	7.35E-01	1.31E-01	3.51E+00	6.75E-00	-1.22E+00	3.73E+00	6.04E+00	NA	NA	NA	
	008	14.9	0.7	1/29/2009	13:46	1.94E+02	1.85E+02	1.98E+02	-2.22E-01	6.74E-01	8.57E-01	9.78E-02	2.64E+00	3.01E-00	1.02E-00	3.23E+00	3.87E+00	NA	NA	NA	
	009	14.9	0.7	5/4/2009	12:29	1.97E+02	1.62E+02	1.54E+02	1.26E-01	6.30E-01	6.93E-01	-2.37E+00	6.66E+00	4.57E-00	8.34E-01	4.25E+00	4.94E+00	NA	NA	NA	
	010	14.9	0.7	7/30/2009	14:26	3.80E+02	1.83E+02	1.89E+02	-2.47E-01	2.76E-01	4.70E-01	2.06E+00	5.42E+00	6.37E-00	4.32E-01	5.99E+00	6.85E+00	NA	NA	NA	
	011	14.9	0.7	11/3/2009	12:19	1.24E+02	1.46E+02	1.51E+02	-2.75E-02	5.54E-01	7.37E-01	-6.29E-01	5.29E+00	5.78E-00	1.74E-00	7.23E+00	8.06E+00	NA	NA	NA	
	012	14.9	0.7	2/8/2010	13:40	3.38E+02	1.68E+02	1.78E+02	5.39E-01	7.74E-01	8.34E-01	5.09E+00	4.35E+00	5.44E-00	4.46E-01	4.41E+00	5.00E+00	NA	NA	NA	
	013	14.9	0.7	4/26/2010	13:22	3.16E+02	1.55E+02	1.47E+02	-7.37E-02	6.52E-01	8.56E-01	3.73E-01	5.22E+00	5.91E-00	3.24E-00	5.03E+00	7.50E+00	NA	NA	NA	
	014	14.9	0.7	8/10/2010	12:08	1.65E+02	1.58E+02	1.73E+02	-1.55E-01	3.48E-01	4.72E-01	-6.34E-01	7.20E+00	8.11E-00	-7.17E+00	5.47E+00	6.45E+00	NA	NA	NA	
	015	14.9	0.7	11/2/2010	12:22	1.97E+02	1.18E+02	1.13E+02	1.31E-01	6.87E-01	8.18E-01	1.61E+00	5.46E+00	6.40E-00	3.45E-00	5.55E+00	8.07E+00	NA	NA	NA	
MW-63-34	001	31.5	17.3	5/18/2007	13:03	2.28E+02	1.58E+02	1.55E+02	1.62E-01	5.13E-01	7.77E-01	1.10E-01	2.21E+00	2.51E-00	3.25E-01	2.65E+00	2.44E+00	1.57E+00	1.54E+01	1.80E+01	MW-63-34
	002	31.5	-17.3	7/30/2007	13:28	2.80E+02	1.77E+02	1.90E+02	-1.64E-01	3.36E-01	4.93E-01	1.73E-01	3.60E+00	3.50E-00	3.98E-01	3.63E+00	4.24E+00	NA	NA	NA	
	003	31.5	-17.3	10/11/2007	12:50	2.31E+02	1.61E+02	1.74E+02	-2.75E-01	4.44E-01	6.73E-01	-6.24E-01	3.60E+00	3.58E-00	3.81E-01	2.65E+00	3.10E+00	NA	NA	NA	
	004	31.5	-17.3	1/9/2008	14:20	3.26E+02	1.65E+02	1.71E+02	1.24E-01	5.57E-01	6.84E-01	1.83E+00	3.63E+00	4.44E-00	3.53E-01	3.93E+00	4.35E+00	NA	NA	NA	
	005	31.5	-17.3	4/23/2008	13:55	4.90E+02	1.68E+02	2.45E+02	3.82E-01	5.58E-01	9.39E-01	1.71E+00	2.65E+00	3.78E-00	-1.77E+00	3.53E+00	4.19E+00	5.77E+00	1.46E+01	2.49E+01	
	006	31.5	-17.3	7/30/2008	11:12	4.41E+02	1.39E+02	1.91E+02	1.15E+00	4.50E-01	6.45E-01	-1.48E-02	2.26E+00	3.87E-00	-7.91E-01	2.52E+00	3.65E+00	NA	NA	NA	
	007	31.5	-17.3	11/5/2008	11:03	4.14E+02	3.77E+02	3.35E+02	3.15E-01	6.77E-01	7.78E-01	5.73E-01	5.43E+00	6.10E-00	-1.40E-01	5.17E+00	5.67E+00	NA	NA	NA	
	008	31.5	-17.3	1/29/2009	12:22	4.20E+02	2.22E+02	1.96E+02	2.20E-01	6.87E-01	8.13E-01	1.41E+00	2.51E+00	3.45E-00	-2.64E-01	2.95E+00	3.23E+00	NA	NA	NA	
	009	31.5	-17.3	5/4/2009	12:10	3.23E+02	1.76E+02	1.59E+02	2.16E-01	6.33E-01	6.89E-01	6.53E-01	7.29E+00	4.86E-00	1.92E-00	3.42E+00	4.32E+00	NA	NA	NA	
	010	31.5	-17.3	7/30/2009	14:00	3.87E+02	1.80E+02	1.88E+02	2.57E-01	5.50E-01	6.47E-01	6.62E-01	5.50E+00	5.65E-00	1.73E-00	5.47E+00	6.47E+00	NA	NA	NA	
	011	31.5	17.3	11/3/2009	11:02	3.10E+02	1.55E+02	1.52E+02	3.73E-01	4.06E-01	6.31E-01	6.59E-02	3.31E+00	9.16E-00	8.03E-01	5.75E+00	6.76E+00	NA	NA	NA	
	012	31.5	-17.3	2/8/2010	13:19	3.06E+02	1.70E+02	1.70E+02	2.26E-01	6.70E-01	8.20E-01	-6.36E-01	3.54E+00	4.33E-00	-8.85E-01	3.82E+00	4.66E+00	NA	NA	NA	
	013	31.5	-17.3	4/26/2010	13:21	2.89E+02	1.53E+02	1.47E+02	-3.04E-01	7.18E-01	9.93E-01	-5.54E-01	5.55E+00	5.88E-00	-1.09E+00	5.12E+00	5.37E+00	NA	NA	NA	
	014	31.5	-17.3	8/10/2010	11:44	1.89E+02	1.64E+02	1.78E+02	2.21E-01	5.39E-01	5.95E-01	2.60E+00	9.29E+00	1.06E-01	5.11E-00	7.21E+00	9.27E+00	NA	NA	NA	
	015	31.5	-17.3	11/2/2010	13:04	3.41E+02	1.35E+02	1.14E+02	3.11E-01	5.72E-01	6.45E-01	1.16E-01	5.66E+00	6.29E-00	-2.31E+00	5.33E+00	6.51E+00	NA	NA	NA	
MW-63-50	001	49.5	-37.2	5/15/2007	11:48	3.26E+02	1.83E+02	1.73E+02	-9.70E-02	6.15E-01	8.32E-01	-1.33E-01	5.28E+00	5.01E-00	6.64E-01	4.23E+00	4.81E+00	-2.41E+00	1.24E+01	1.51E+01	MW-63-50
	002	49.5	-37.2	7/25/2007	14:00	2.25E+02	1.80E+02	1.95E+02	1.29E-01	6.35E-01	6.34E-01	2.08E+00	3.18E+00	3.90E-00	-1.58E-01	3.12E+00	3.54E+00	NA	NA	NA	
	003	49.5	-37.2	10/11/2007	11:10	2.89E+02	1.62E+02	1.73E+02	-3.41E-01	5.10E-01	7.57E-01	6.21E-01	2.58E+00	3.39E-00	1.55E+00	3.17E+00	3.86E+00	NA	NA	NA	
	004	49.5	-37.2	1/9/2008	12:32	3.56E+02	1.67E+02	1.72E+02	4.48E-01	7.41E-01	8.26E-01	3.37E-01	2.66E+00	3.02E-00	-1.42E+00	3.14E+00	3.20E+00	NA	NA	NA	
	005	49.5	-37.2	4/23/2008	13:04	2.70E+02	1.63E+02	2.55E+02	4.27E-01	5.45E-01	9.26E-01	-1.10E+00	1.65E+00	2.93E-00	9.01E-01	1.73E+00	3.27E+00	2.43E+00	1.40E+01	2.41E+01	
	006	49.5	-37.2	7/30/2008	10:29	3.35E+02	1.32E+02	1.91E+02	6.10E-01	4.97E-01	8.32E-01	-1.77E+00	1.03E+00	2.66E-00	-1.22E+00	1.91E+00	2.80E+00	NA	NA	NA	
	007	49.5	-37.2	11/5/2008	9:39	3.17E+02	1.94E+02	1.99E+02	5.67E-01	6.50E-01	6.79E-01	1.26E+00	6.36E+00	7.04E-00	-7.21E-01	5.52E+00	7.08E+00	NA	NA	NA	
	008	49.5	-37.2	1/29/2009	14:06	2.90E+02	2.04E+02	1.96E+02	5.67E-01	8.20E-01	8.76E-01	8.69E-02	3.69E+00	3.51E-00	1.37E-00	3.41E+00	4.19E+00	NA	NA	NA	
	009	49.5	-37.2	5/4/2009	11:31	3.30E+02	1.80E+02	1.55E+02	1.58E-01	5.73E-01	6.59E-01	1.22E+00	6.27E+00	4.18E-00	-2.49E-01	3.93E+00	4.34E+00	NA	NA	NA	
	010	49.5	-37.2	7/30/2009	11:05	3.53E+02	1.80E+02	1.87E+02	5.40E-01	5.84E-01	5.31E-01	2.00E+00	6.27E+00	7.59E-00	1.35E+00	5.63E+00	7.17E+00	NA	NA	NA	
	011	49.5	-37.2	11/3/2009	10:42	3.60E+02	1.58E+02	1.51E+02	-5.37E-03	5.31E-01	6.34E-01	2.14E-01	6.61E+00	7.54E-00	-1.30E+00	7.20E+00	7.57E+00	NA	NA	NA	
	012	49.5	-37.2	2/8/2010	12:45	3.34E+02	1.67E+02	1.77E+02	5.42E-01	7.40E-01	7.92E-01	-1.46E+00	3.25E+00	3.55E-00	7.59E-01	3.33E+00	3.81E+00	NA	NA	NA	
	013	49.5	-37.2	4/26/2010	12:06	4.13E+02	1.62E+02	1.45E+02	2.38E-01	5.82E-01	6.82E-01	-5.57E+00	1.01E+01	1.12E-01	-4.30E+00	5.74E+00	6.45E+00	NA	NA	NA	
	014	49.5	-37.2	8/10/2010	14:32	2.72E+02	1.65E+02	1.75E+02	-2.47E-02	5.47E-01	6.90E-01	-1.32E+00	7.10E+00	7.82E-00	7.73E-01	7.74E+00	8.96E+00	NA	NA	NA	
	015	49.5	-37.2	11/2/2010	15:07	3.29E+02	1.31E+02	1.12E+02	2.27E-01	6.23E-01	7.23E-01	-2.98E-02	7.72E+00	8.42E-00	2.75E-00	8.03E+00	9.78E+00	NA	NA	NA	
MW-63-93	001	93	-80.7	11/2/2006	13:10	5.16E+02	1.95E+02	5.70E+01	7.81E-01	6.73E-01	7.47E-01	5.46E-01	1.43E+01	1.59E-01	-4.42E+00	1.67E+01	2.03E+01	-5.31E+00	1.23E+01	1.54E+01	MW-63-93
	002	93	-80.7	5/15/2007	12:45	2.81E+02	1.80E+02	1.75E+02	8.20E-02	7.29E-01	9.34E-01	1.87E-01	4.60E+00	4.60E-00	9.57E-01	4.51E+00	4.51E+00	NA	NA	NA	
	003	93	-80.7	7/25/2007	14:34	2.37E+02	1.02E+02	1.97E+02	-4.43E-01	4.41E-01	5.29E-01	1.24E+00	3.31E+00	3.90E-00	9.20E-03	3.75E+00	4.16E+00	NA	NA	NA	
	004	93	-80.7	10/11/2007	11:17	1.15E+02	1.55E+02	1.72E+02	8.19E-01	8.90E-01	9.47E-01	-6.98E-01	2.57E+00	3.10E-00	-1.77E+00	3.33E+00	3.23E+00	NA	NA	NA	
	005	93	-80.7	1/9/2008	12:46	2.15E+02	1.59E+02	1.71E+02	1.86E-01	7.88E-01	8.45E-01	7.74E-01	3.66E+00	3.56E-00	1.65E-01	3.23E+00	3.58E+00	NA	NA	NA	
	006	93	-80.7	4/23/2008	11:23	3.02E+02	1.65E+02	2.55E+02	2.93E-01	5.46E-01	9.39E-01	3.49E-01	2.27E+00	3.88E-00	7.04E-01	2.41E+00	4.14E+00	-3.75E+00	1.41E+01	2.46E+01	
	007	93	-80.7	7/29/2008	14:17	2.38E+02	1.25E+02	1.92E+02	2.28E-03	2.21E-01	3.36E-01	-4.32E-01	2.01E+00	3.36E-00	-3.19E-01	1.95E+00	3.23E+00	NA	NA	NA	
	008	93	-80.7	11/5/2008	10:14	3.90E+02	3.75E+02	3.86E+02	-9.77E-02	1.94E-01	2.36E-01	1.53E+00	5.10E+00	5.92E-00	2.80E-00	5.24E+00	7.60E+00	NA	NA	NA	
	009	93	-80.7	1/29/2009	14:20	3.40E+02	2.09E+02	1.93E+02	1.18E-01	6.33E-01	7.75E-01	-9.44E-01	3.17E+00	3.42E-00	-8.17E-01	3.63E+00	3.88E+00	NA	NA	NA	
	010	93	-80.7	5/4/2009	12:00	1.66E+02	1.59E+02	1.54E+02	5.44E-01	5.13E-01	5.53E-01	2.00E+00	6.72E+00	4.48E-00	-1.69E+00	3.63E+00	3.63E+00	NA	NA	NA	
	011	93	-80.7	7/30/2009	11:30	2.64E+02	1.77E+02	1.88E+02	1.81E-01	3.93E-01	4.15E-01	2.45E+00	5.54E+00	6.51E-00	3.68E-01	5.65E+00	6.36E+00	NA	NA	NA	
	012	93	-80.7	11/3/2009	10:55	3.01E+02	1.53E+02	1.51E+02	7.11E-01	7.17E-01	7.57E-01	-2.46E+00	4.62E+00	5.00E-00	5.40E-01	4.72E+00	5.26E+00	NA	NA	NA	
	013	93	80.7	2/8/2010	13:00	2.90E+02	1.65E+02	1.77E+02	1.78E-01	6.53E-01	8.36E-01	1.10E+00	1.41E+00	1.71E-00	5.53E-01	1.51E+00	3.11E+00	NA	NA	NA	
	014	93	-80.7	4/26/2010	12:42	3.03E+02	1.52E+02	1.47E+02	-2.90E-02	5.51E-01	7.42E-01	-6.91E-01	5.55E+00	6.23E-00	-3.69E+00	5.52E+00	5.93E+00	NA	NA	NA	
	015	93	-80.7	8/10/2010	15:10	1.95E+02	1.61E+02	1.74E+02	-1.91E-01	4.38E-01	6.16E-01	1.24E+00	6.64E+00	7.70E-00	2.61E-01	7.58E+00	8.46E+00	NA	NA	NA	
	016	93	-80.7	11/2/2010	15:08	2.59E+02	1.21E+02	1.11E+02	3.29E-01	5.72E-01	6.42E-01	-4.18E-02	4.55E+00	5.64E-00	3.58E+00	5.80E+00	7.11E+00	NA	NA	NA	
MW-63-112	001	115	-99.2	5/15/2007	13:10	4.24E+02	1.95E+02	1.75E+02	-5.27E-02	7.50E-01	9.42E-01	2.58E+00	3.50E+00	3.59E-00	9.59E-01	3.72E+00	4.19E+00	-5.14E+00	1.34E+01	1.55E+01	MW-63-112

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	
MW-63-112	002	111 5	-99 2	7/25/2007	14 52	2 69E+02	1 83E+02	1 97E+02	6 32E-02	3 46E-01	3 99E-01	6 92E-01	4 14E+00	4 19E-00	-6 55E-01	3 94E+00	4 34E+00	NA	NA	NA	MW-63-112
	003	111 5	-99 2	10/11/2007	13 45	2 78E+02	1 62E+02	1 72E+02	-7 54E-02	6 73E-01	8 71E-01	-3 04E+00	5 49E+00	4 52E-00	7 65E-01	3 52E+00	4 15E+00	NA	NA	NA	
	004	111 5	-99 2	/9/2008	10 20	4 69E+02	1 73E+02	1 72E+02	2 19E-01	5 07E-01	5 92E-01	3 90E-01	3 30E+00	3 34E-00	2 87E-01	3 56E+00	3 75E+00	NA	NA	NA	
	005	111 5	-99 2	4/23/2008	11 08	3 72E+02	1 68E+02	2 55E+02	-3 90E-02	3 96E-01	7 34E-01	4 77E-01	2 30E+00	3 89E-00	1 75E-00	2 73E+00	4 52E+00	-5 00E-01	1 43E+01	2 48E+01	
	006	111 5	-99 2	7/29/2008	14 20	2 07E+02	1 01E+02	1 53E+02	7 08E-01	5 39E-01	8 56E-01	6 61E-01	2 23E+00	3 89E-00	1 07E-00	2 45E+00	4 41E+00	NA	NA	NA	
	007	111 5	-99 2	11/4/2008	17 41	2 75E+02	1 97E+02	2 31E+02	4 72E-01	5 88E-01	6 17E-01	1 89E-01	5 68E+00	6 43E-00	-2 75E+00	8 34E+00	7 58E+00	NA	NA	NA	
	008	111 5	-99 2	1/30/2009	14 39	4 37E+02	2 21E+02	1 92E+02	2 43E 02	7 80E 01	9 34E 01	1 10E+00	2 61E+00	2 86E-00	1 77E-00	3 41E+00	4 13E+00	NA	NA	NA	
	009	111 5	-99 2	5/4/2009	14 30	4 42E102	1 94E102	1 54E102	1 54E-01	5 92E-01	7 30E-01	-2 30E100	6 10E100	4 12E 00	1 33E 00	3 93E100	4 71E100	NA	NA	NA	
	010	111 5	-99 2	7/30/2009	13 54	4 64E+02	1 88E+02	1 89E+02	1 50E-01	5 70E-01	6 78E-01	-5 23E+00	7 61E+00	7 36E-00	4 44E-00	5 93E+00	8 68E+00	NA	NA	NA	
	011	111 5	-99 2	11/3/2009	11 17	4 96E+02	1 62E+02	1 91E+02	3 07E-01	8 31E-01	9 25E-01	4 38E-01	6 15E+00	6 86E-00	-4 82E+00	7 04E+00	6 72E+00	NA	NA	NA	
	012	111 5	-99 2	2/8/2010	13 14	3 80E+02	1 70E+02	1 79E+02	6 50E-01	7 23E-01	7 33E-01	-6 93E-01	3 66E+00	4 28E-00	-2 22E+00	5 73E+00	4 89E+00	NA	NA	NA	
	013	111 5	-99 2	4/26/2010	12 39	4 47E+02	1 64E+02	1 42E+02	4 81E-01	5 84E-01	6 36E-01	4 15E+00	6 75E+00	8 37E-00	4 44E-00	7 85E+00	9 87E+00	NA	NA	NA	
	014	111 5	-99 2	8/10/2010	14 52	3 71E+02	1 73E+02	1 78E+02	2 03E-01	4 37E-01	4 78E-01	-3 00E+00	7 68E+00	7 90E-00	-5 28E+00	9 73E+00	9 11E+00	NA	NA	NA	
	015	111 5	-99 2	11/2/2010	15 05	3 01E+02	1 29E+02	1 13E+02	6 02E-02	5 25E-01	6 51E-01	-2 54E+00	6 29E+00	6 56E-00	1 95E-00	5 72E+00	7 95E+00	NA	NA	NA	
MW-63-121	001	121	-108 7	5/15/2007	13 42	3 11E+02	1 83E+02	1 75E+02	3 00E-01	7 97E-01	9 37E-01	6 30E-01	4 25E+00	4 20E-00	-1 19E+00	3 65E+00	3 87E+00	2 29E+00	1 52E+01	1 77E+01	MW-63-121
	002	121	-108 7	7/25/2007	11 50	2 96E+02	1 82E+02	1 94E+02	3 19E-01	5 31E-01	5 91E-01	-1 11E+00	3 59E+00	3 46E-00	1 70E-01	3 45E+00	3 87E+00	NA	NA	NA	
	003	121	-108 7	10/11/2007	13 51	4 62E+02	1 70E+02	1 74E+02	2 39E-01	6 25E-01	7 37E-01	2 49E+00	4 51E+00	4 94E-00	1 54E-00	4 03E+00	4 54E+00	NA	NA	NA	
	004	121	108 7	/9/2008	10 42	5 40E+02	1 74E+02	1 71E+02	2 06E 02	4 70E 01	6 29E 01	2 51E+00	3 38E+00	4 15E-00	1 03E-00	3 41E+00	4 02E+00	NA	NA	NA	
	005	121	-108 7	4/23/2008	11 17	4 54E+02	1 34E+02	1 98E+02	5 36E-01	4 94E-01	8 34E-01	-3 56E-01	9 40E-01	1 55E-00	-1 33E+00	2 71E+00	1 81E+00	-3 22E+00	1 41E+01	2 40E+01	
	006	121	-108 7	7/29/2008	14 30	3 44E+02	1 04E+02	1 51E+02	7 60E-01	3 33E-01	5 73E-01	2 86E-01	2 68E+00	3 57E-00	1 23E-00	2 33E+00	4 11E+00	NA	NA	NA	
	007	121	-108 7	11/4/2008	12 43	4 95E+02	2 06E+02	1 98E+02	3 81E-01	7 52E-01	8 55E-01	-7 97E-01	5 42E+00	5 97E-00	1 23E-00	5 53E+00	7 42E+00	NA	NA	NA	
	008	121	-108 7	1/30/2009	14 41	6 23E+02	2 42E+02	1 97E+02	7 30E-01	5 59E-01	4 47E-01	1 91E+00	3 18E+00	3 92E-00	9 14E-01	2 84E+00	3 45E+00	NA	NA	NA	
	009	121	-108 7	5/4/2009	14 35	5 38E+02	2 04E+02	1 55E+02	7 71E-01	8 55E-01	9 23E-01	-6 55E-02	8 16E+00	5 44E-00	2 35E-00	4 23E+00	5 35E+00	NA	NA	NA	
	010	121	-108 7	7/30/2009	14 03	4 66E+02	1 88E+02	1 89E+02	5 21E-01	5 49E-01	5 56E-01	1 05E+00	4 69E+00	5 53E-00	-2 66E+00	5 67E+00	5 19E+00	NA	NA	NA	
	011	121	-108 7	11/3/2009	11 46	5 01E+02	1 64E+02	1 51E+02	5 66E-01	8 73E-01	9 57E-01	-5 33E+00	9 88E+00	8 44E-00	-2 07E+00	9 35E+00	8 77E+00	NA	NA	NA	
	012	121	-108 7	2/8/2010	13 18	5 15E+02	1 74E+02	1 77E+02	3 18E-01	6 45E-01	7 40E-01	-2 07E-01	3 52E+00	4 30E-00	-2 48E-01	5 33E+00	4 92E+00	NA	NA	NA	
	013	121	-108 7	4/26/2010	12 59	6 05E+02	1 80E+02	1 46E+02	4 17E-01	6 39E-01	6 57E-01	3 07E+00	6 06E+00	7 40E-00	1 15E-00	6 13E+00	7 15E+00	NA	NA	NA	
	014	121	108 7	8/10/2010	11 20	5 39E+02	1 80E+02	1 77E+02	3 67E 01	5 93E 01	6 58E 01	9 10E 01	8 12E+00	8 95E-00	6 59E 01	8 75E+00	9 58E+00	NA	NA	NA	
	015	121	-108 7	11/2/2010	11 46	5 20E102	1 49E102	1 10E102	6 30E-01	7 57E-01	8 11E-01	1 17E100	6 66E100	7 60E 00	-4 66E100	7 17E100	6 03E100	NA	NA	NA	
MW-63-163	001	162 5	-150 2	5/15/2007	11 38	5 78E+02	2 10E+02	1 73E+02	-6 43E-02	6 50E-01	8 74E-01	-8 54E-01	2 64E+00	2 59E-00	9 51E-01	2 23E+00	2 64E+00	-9 58E-01	1 44E+01	1 73E+01	MW-63-163
	002	162 5	-150 2	7/25/2007	12 13	4 79E+02	1 91E+02	1 96E+02	-7 20E-01	5 46E-01	6 26E-01	-3 18E+00	5 16E+00	4 89E-00	-4 54E-01	5 70E+00	5 99E+00	NA	NA	NA	
	003	162 5	-150 2	10/11/2007	14 18	3 49E+02	1 65E+02	1 73E+02	7 93E-03	7 98E-01	9 50E-01	-4 46E-01	3 00E+00	3 28E-00	-1 91E-02	2 94E+00	3 30E+00	NA	NA	NA	
	004	162 5	-150 2	/9/2008	10 51	5 68E+02	1 77E+02	1 72E+02	3 19E-03	5 55E-01	7 17E-01	-4 52E-01	3 50E+00	3 89E-00	2 23E-00	5 11E+00	4 38E+00	NA	NA	NA	
	005	162 5	-150 2	4/23/2008	11 23	4 44E+02	1 70E+02	2 55E+02	1 02E-01	4 33E-01	7 37E-01	8 04E-01	1 06E+00	1 84E-00	6 60E-01	1 13E+00	1 94E+00	5 30E+00	1 52E+01	2 60E+01	
	006	162 5	-150 2	7/29/2008	14 56	4 48E+02	1 07E+02	1 53E+02	-8 79E-02	2 50E-01	4 37E-01	-2 09E+00	2 34E+00	3 61E-00	9 03E-01	2 52E+00	4 48E+00	NA	NA	NA	
	007	162 5	-150 2	11/4/2008	12 45	6 85E+02	1 86E+02	1 76E+02	-1 44E-01	5 53E-01	7 46E-01	1 77E-01	5 37E+00	6 12E-00	7 78E-01	5 21E+00	7 23E+00	NA	NA	NA	
	008	162 5	-150 2	1/29/2009	11 57	5 81E+02	2 40E+02	1 95E+02	2 06E-01	5 54E-01	6 42E-01	5 82E+00	7 23E+00	3 42E-00	-1 73E-01	2 81E+00	3 03E+00	NA	NA	NA	
	009	162 5	-150 2	5/4/2009	14 39	4 36E+02	1 94E+02	1 56E+02	-1 10E-02	6 33E-01	7 41E-01	-2 80E-01	5 57E+00	3 71E-00	-4 47E+00	4 53E+00	3 64E+00	NA	NA	NA	
	010	162 5	-150 2	7/30/2009	13 45	6 06E102	1 90E102	1 20E102	-1 33E-01	3 60E-01	5 36E-01	-2 07E100	5 47E100	5 52E 00	-1 49E-01	5 03E100	6 40E100	NA	NA	NA	
	011	162 5	-150 2	11/3/2009	13 47	5 22E102	1 64E102	1 51E102	4 30E-01	0 20E-01	9 30E-01	5 72E-01	4 50E100	5 33E 00	6 03E 00	4 92E100	7 07E100	NA	NA	NA	
	012	162 5	-150 2	2/8/2010	15 36	5 94E+02	1 77E+02	1 78E+02	-1 49E-01	5 54E-01	7 92E-01	-8 47E-02	6 87E+00	5 81E-00	9 37E-01	4 95E+00	5 83E+00	NA	NA	NA	
	013	162 5	-150 2	4/26/2010	14 40	5 29E+02	1 70E+02	1 43E+02	1 98E-01	5 54E-01	6 75E-01	-1 45E+00	7 71E+00	8 86E-00	-2 58E+00	5 71E+00	5 97E+00	NA	NA	NA	
	014	162 5	-150 2	8/10/2010	11 21	4 13E+02	1 74E+02	1 78E+02	2 45E-01	4 43E-01	4 90E-01	-6 87E-01	8 55E+00	9 17E-00	-5 25E-01	8 23E+00	9 24E+00	NA	NA	NA	
	015	162 5	-150 2	11/2/2010	11 49	4 44E+02	1 41E+02	1 10E+02	7 71E-01	8 38E-01	8 77E-01	-3 99E+00	9 88E+00	1 10E-01	2 94E+00	5 12E+00	7 63E+00	NA	NA	NA	
MW-63-174	001	174	-161 7	5/15/2007	11 54	5 93E+02	2 12E+02	1 73E+02	2 64E-01	7 52E-01	9 34E-01	-6 91E-01	2 52E+00	2 70E-00	8 16E-03	2 46E+00	2 76E+00	1 30E+00	1 26E+01	1 51E+01	MW-63-174
	002	174	-161 7	7/25/2007	12 00	5 28E+02	1 94E+02	1 97E+02	-2 78E-01	4 41E-01	6 59E-01	6 20E-01	3 58E+00	4 55E-00	-3 03E-01	3 45E+00	3 80E+00	NA	NA	NA	
	003	174	-161 7	10/11/2007	14 22	3 70E+02	1 65E+02	1 72E+02	-2 85E-01	7 14E-01	9 39E-01	1 94E+00	2 50E+00	2 70E-00	-8 59E-01	2 55E+00	2 71E+00	NA	NA	NA	
	004	174	-161 7	/9/2008	10 45	6 23E+02	1 79E+02	1 72E+02	6 16E-01	6 95E-01	7 74E-01	-1 74E+00	3 14E+00	3 33E-00	1 48E-00	3 03E+00	3 77E+00	NA	NA	NA	
	005	174	-161 7	4/23/2008	11 21	4 89E+02	1 72E+02	2 55E+02	6 82E 02	3 55E 01	7 18E 01	5 74E 01	2 61E+00	3 30E-00	3 66E 01	2 43E+00	1 19E+00	2 11E+00	1 47E+01	2 50E+01	
	006	174	-161 7	7/29/2008	14 40	4 49E102	1 40E102	1 92E102	6 50E-02	2 70E-01	4 30E-01	-3 70E100	2 23E100	3 71E 00	-1 72E100	2 65E100	3 79E100	NA	NA	NA	
	007	174	-161 7	11/4/2008	12 44	4 77E+02	2 04E+02	1 99E+02	-2 76E-01	5 52E-01	7 33E-01	-2 68E+00	4 23E+00	4 74E-00	1 18E-00	5 42E+00	6 30E+00	NA	NA	NA	
	008	174	-161 7	1/29/2009	11 55	4 92E+02	2 28E+02	1 91E+02	4 21E-01	5 96E-01	6 51E-01	-4 55E-01	3 81E+00	3 61E-00	-1 34E+00	3 24E+00	3 52E+00	NA	NA	NA	
	009	174	-161 7	5/4/2009	14 28	4 57E+02	1 94E+02	1 53E+02	-2 15E-01	6 52E-01	7 37E-01	1 98E-01	4 58E+00	3 05E-00	-2 66E+00	3 11E+00	2 63E+00	NA	NA	NA	
	010	174	-161 7	7/30/2009	13 05	4 22E+02	1 86E+02	1 89E+02	-1 74E-01	5 20E-01	6 32E-01	1 40E-01	5 52E+00	6 18E-00	1 22E-00	5 77E+00	6 83E+00	NA	NA	NA	
	011	174	-161 7	11/3/2009	13 53	4 98E+02	1 64E+02	1 51E+02	-1 04E-02	7 92E-01	9 91E-01	1 10E+00	6 69E+00	7 80E-00	5 41E-00	5 04E+00	8 21E+00	NA	NA	NA	
	012	174	-161 7	2/8/2010	15 32	5 05E+02	1 74E+02	1 78E+02	3 28E-02	6 25E-01	8 33E-01	-9 48E-02	3 76E+00	4 18E-00	-2 02E+00	3 75E+00	3 88E+00	NA	NA	NA	
	013	174	-161 7	4/26/2010	14 28	4 98E+02	1 71E+02	1 46E+02	-1 69E-02	5 53E-01	7 24E-01	2 68E+00	4 74E+00	5 86E-00	-4 68E+00	5 25E+00	4 32E+00	NA	NA	NA	
	014	174	-161 7	8/10/2010	11 40	3 93E+02	1 65E+02	1 71E+02	3 54E-01	5 43E-01	6 31E-01	-3 37E+00	7 07E+00	6 89E-00	-1 41E+00	7 84E+00	8 11E+00	NA	NA	NA	
	015	174	-161 7	11/2/2010	11 50	2 63E+02	1 26E+02	1 13E+02	-1 42E-01	4 59E-01	6 36E-01	-6 31E-01	6 03E+00	6 82E-00	2 17E-01	5 42E+00	7 11E+00	NA	NA	NA	
MW 65 18	001	43 3	26 356	/4/2007	12 00	2 08E+02	1 83E+02	1 80E+02	0 00E+00	7 80E 01	8 80E 01	1 60E+00	3 60E+00	3 90E-00	5 00E 01	3 03E+00	3 70E+00	2 20E+00	6 30E+00	7 30E+00	MW 65 18
MW-65-80	001	71 4	-1 659	9/8/2006	9 40	3 29E+01	1 62E+02	1 74E+02	4 72E-01	9 80E-01	1 04E+00	-5 15E-01	1 59E+00	2 18E-00	-2 34E-01	1 81E+00	1 98E+00	NA	NA	NA	MW-65-80
	002	71 4	-1 659	/4/2007	12 35	1 83E+02	1 80E+02	1 80E+02	1 60E-01	7 80E-01	8 70E-01	-2 50E-01	2 22E+00	2 50E-00	-1 13E+00	2 31E+00	2 80E+00	-1 90E+00	6 60E+00	7 40E+00	
MW-66-21	001	14 1	0	/30/2007	13 45	3 57E+03	2 91E+02	1 96E+02	1 79E+00	7 08E-01	2 08E+03	1 78E-01	3 07E+00	3 51E-00	2 21E+00	3 27E+00	4 20E+00	NA	NA	NA	MW-66-21
	002	14 1	0	10/15/2007	10 45	1 04E+03	2 24E+02	1 95E+02	2 42E+00	7 97E-01	5 30E-01	-8 32E-01	3 03E+00	2 74E-00	1 01E-01	2 77E+00	3 18E+00	1 48E+01	2 06E+01	2 28E+01	

J:\17,000-18,999\17869\17869-92.MGQ-2010\FINAL\Tables\;
Table 5 - Historic Groundwater Analytical Results.xlsx;
Table5

See Page 32 for Notes

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	
MW-66-21	003	14 1	0	1/14/2008	11 33	8 18E+C2	4 62E+C2	4 16E+02	1 09E+00	8 96E-0:	8 19E-01	1 68E+00	3 14E+0(	3 77E-00	2 35E-00	3 85E+00	4 26E+00	-5 07E+00	2 12E+01	2 55E+01	MW-66-21
	004	14 1	0	4/21/2008	14 10	9 53E+C2	1 51E+C2	1 93E+02	1 31E+00	2 35E-0:	2 32E-01	6 53E-01	2 26E+0(	4 07E-00	1 86E-02	2 25E+00	3 74E+00	-7 23E+00	8 88E+00	1 55E+01	
	005	14 1	0	7/29/2008	11 48	7 83E+C2	1 02E+C2	1 30E+02	9 07E-0:	3 56E-0:	4 39E-01	-1 01E+00	1 88E+0(	2 92E-00	1 71E-00	2 17E+00	3 99E+00	-5 26E+00	: 66E+01	2 99E+01	
	006	14 1	0	11/4/2008	10 30	5 34E+C2	2 07E+C2	1 54E+02	1 38E+00	6 96E-0:	6 59E-01	1 44E+00	4 67E+0(	5 42E-00	2 98E-00	5 17E+00	6 47E+00	-5 63E+00	: 79E+01	2 09E+01	
	007	14 1	0	1/27/2009	13 52	4 61E+C2	1 74E+C2	1 75E+02	2 91E-0:	7 50E-0:	8 72E-01	1 60E-01	5 45E+0(	3 11E-00	-1 87E+00	2 93E+00	2 71E+00	: 29E+01	: 74E+01	1 93E+01	
	008	14 1	0	3/17/2009	17 00	4 29E+C2	3 80E+C2	3 81E+02	3 49E-0:	6 45E-0:	7 79E-01	1 60E-01	6 36E+0(	4 24E-00	1 77E-00	3 84E+00	4 65E+00	-4 93E+00	: 70E+01	1 99E+01	
	009	14 1	0	4/20/2009	17 00	8 28E+C1	1 65E+C2	1 87E+02	1 93E 0:	5 55E 0:	6 50E 01	1 27E+00	7 23E+0(	4 82E-00	9 73E 01	4 11E+00	4 84E+00	1 86E+00	: 94E+01	2 22E+01	
	010	14 1	0	7/28/2009	14 10	0 23E 02	2 52E 02	2 31E 02	4 51E-0:	6 20E-0:	7 54E-01	-4 32E-0:	4 64E 00	4 51E 00	0 39E-01	3 65E 00	4 34E+00	8 40E 00	2 07E+01	2 33E+01	
	011	14 1	0	11/11/2009	13 46	9 31E+C2	2 57E+C2	2 34E+02	3 29E-0:	8 37E-0:	9 17E-01	-2 53E-0:	5 70E+0(	6 26E-00	1 12E-00	5 73E+00	6 68E+00	-1 49E-01	: 61E+01	1 96E+01	
	012	14 1	0	2/22/2010	14 36	9 60E+C2	2 00E+C2	1 75E+02	8 97E-0:	1 30E-0:	1 14E-01	4 96E-01	4 42E+0(	5 51E-00	-1 53E+00	5 07E+00	5 84E+00	-5 33E+00	: 96E+01	2 28E+01	
	013	14 1	0	4/9/2010	15 27	9 50E+C2	4 07E+C2	3 82E+02	1 12E-02	4 34E-0:	5 44E-01	3 09E+00	6 75E+0(	8 43E-00	3 15E-00	5 12E+00	7 18E+00	-2 25E+00	: 92E+01	2 25E+01	
	014	14 1	0	8/9/2010	12 30	1 07E+C3	2 01E+C2	1 29E+02	1 17E+00	5 52E-0:	4 41E-01	-5 85E+00	9 45E+0(	9 34E-00	-9 97E-01	8 07E+00	8 65E+00	3 11E+00	: 19E+01	1 37E+01	
	015	14 1	0	11/10/2010	15 13	3 22E+C2	1 64E+C2	3 46E+02	2 57E-0:	7 74E-0:	1 84E+00	6 04E+00	5 26E+0(	1 28E-01	-1 91E-01	5 67E+00	1 26E+01	9 56E+00	8 45E+00	1 85E+01	
MW-66-36	001	33 6	-19 5	7/30/2007	12 49	9 10E+C3	4 13E+C2	1 94E+02	6 20E+00	1 19E+00	6 05E-01	-9 84E-0:	2 67E+0(	2 76E-00	-5 59E-01	2 93E+00	3 06E+00	NA	NA	NA	MW-66-36
	002	33 6	-19 5	10/15/2007	10 16	8 95E+C3	4 61E+C2	1 92E+02	1 12E+01	1 61E+00	5 53E-01	0 00E+00	8 34E+0(	4 32E-00	-2 92E-01	4 34E+00	4 68E+00	: 17E+01	: 86E+01	2 05E+01	
	003	33 6	-19 5	1/14/2008	11 40	7 26E+C3	1 01E+C3	4 16E+02	1 51E+01	2 40E+00	8 84E-01	2 54E+00	3 38E+0(	4 14E-00	-1 08E+00	3 73E+00	3 39E+00	7 19E+00	2 36E+01	2 71E+01	
	004	33 6	-19 5	4/21/2008	13 25	6 09E+C3	2 09E+C2	1 97E+02	1 32E+01	5 27E-0:	3 55E-01	-2 89E-0:	2 09E+0(	3 46E-00	-2 09E+00	3 54E+00	4 13E+00	-3 35E-01	8 99E+00	1 54E+01	
	005	33 6	19 5	7/29/2008	12 05	5 01E+C3	1 91E+C2	1 30E+02	1 10E+01	1 06E+00	6 20E 01	2 07E 01	1 66E+0(	2 82E-00	1 05E+00	1 93E+00	3 00E+00	1 00E+00	: 69E+01	2 96E+01	
	006	33 6	-19 5	11/4/2008	10 40	5 44E+C3	2 34E+C2	1 57E+02	1 38E+01	1 71E+00	5 23E-01	6 91E-01	4 32E+0(	4 90E-00	1 78E-00	5 24E+00	6 23E+00	3 37E-01	: 64E+01	1 88E+01	
	007	33 6	-19 5	1/27/2009	13 07	3 65E+C3	7 62E+C2	4 41E+02	1 22E+01	1 56E+00	6 15E-01	-1 04E+00	2 68E+0(	3 06E-00	6 35E-02	3 27E+00	3 72E+00	: 45E+01	: 70E+01	1 87E+01	
	008	33 6	-19 5	4/20/2009	15 26	4 39E+C3	4 54E+C2	1 87E+02	1 07E+01	1 42E+00	5 47E-01	5 54E-02	6 44E+0(	4 29E-00	-1 13E+00	4 03E+00	4 20E+00	8 95E+00	: 91E+01	2 21E+01	
	009	33 6	-19 5	7/28/2009	13 41	3 05E+C3	4 10E+C2	2 10E+02	7 51E+00	1 21E+00	3 95E-01	3 19E+00	6 23E+0(	3 54E-00	-6 56E-01	3 65E+00	3 98E+00	6 22E+00	: 92E+01	2 16E+01	
	010	33 6	-19 5	11/11/2009	13 18	4 32E+C3	4 44E+C2	2 34E+02	6 32E+00	1 24E+00	6 70E-01	3 55E+00	6 55E+0(	8 31E-00	-8 32E-01	7 47E+00	7 95E+00	-3 91E+00	: 72E+01	2 08E+01	
	011	33 6	-19 5	2/22/2010	14 04	3 43E+C3	2 91E+C2	1 75E+02	7 33E+00	1 53E+00	7 17E-01	4 16E-01	4 70E+0(	5 29E-00	4 35E-01	5 42E+00	6 09E+00	-8 21E+00	: 94E+01	2 26E+01	
	012	33 6	-19 5	4/9/2010	15 17	3 64E+C3	5 90E+C2	3 87E+02	7 35E+00	1 36E+00	7 54E-01	1 79E+00	7 65E+0(	9 10E-00	6 63E-00	8 54E+00	1 20E+01	-7 64E+00	: 69E+01	2 02E+01	
	013	33 6	-19 5	8/9/2010	11 47	3 08E+C3	3 06E+C2	1 24E+02	6 40E+00	1 07E+00	3 74E-01	-1 53E+00	8 82E+0(	9 41E-00	4 62E-00	7 61E+00	1 02E+01	4 59E+00	: 56E+01	1 80E+01	
	014	33 6	-19 5	11/10/2010	12 33	3 13E+C3	2 96E+C2	3 96E+02	7 43E+00	1 03E+00	1 13E+00	5 42E+00	3 57E+0(	9 67E-00	7 18E-01	4 34E+00	9 81E+00	-4 23E+00	9 63E+00	2 16E+01	
MW 67 39	001	38 3	-25 8	8/31/2007	12 05	4 86E+C3	4 34E+C2	1 92E+02	1 36E+01	1 36E+00	4 73E 01	1 93E 0:	2 02E+0(	2 24E-00	9 75E 01	2 03E+00	2 09E+00	NA	NA	NA	MW 67 39
	002	38 3	-25 8	11/1/2007	11 30	5 07E+C3	3 75E+C2	1 25E+02	2 71E+01	2 44E+00	6 21E-01	1 02E+01	4 11E+0(	1 90E 00	3 69E-01	2 07E+00	2 39E+00	2 51E+00	: 60E+01	1 93E+01	
	004	38 3	-25 8	2/25/2008	13 38	4 17E+C3	8 28E+C2	5 29E+02	2 35E+01	1 77E+00	6 97E-01	-1 15E+00	3 44E+0(	3 73E-00	1 99E-00	4 32E+00	3 98E+00	-5 41E-01	2 26E+01	2 63E+01	
	005	38 3	-25 8	7/28/2008	14 07	3 87E+C3	1 72E+C2	1 50E+02	1 37E+01	1 11E+00	3 47E-01	-1 03E+00	2 60E+0(	3 42E-00	4 47E-01	2 10E+00	3 68E+00	6 84E+00	: 62E+01	2 88E+01	
	007	38 3	-25 8	12/18/2008	11 30	3 18E+C3	2 66E+C2	1 71E+02	1 52E+01	1 69E+00	1 00E+00	1 18E+00	4 61E+0(	5 40E-00	7 33E-01	5 04E+00	5 81E+00	3 37E-01	: 68E+01	1 94E+01	
	008	38 3	-25 8	1/27/2009	16 15	3 67E+C3	2 91E+C2	1 92E+02	1 42E+01	1 71E+00	7 52E-01	-8 03E-0:	2 04E+0(	2 15E-00	-1 11E-01	2 05E+00	2 25E+00	: 12E+01	: 68E+01	1 87E+01	
	009	38 3	-25 8	4/20/2009	15 02	3 88E+C3	4 14E+C2	1 90E+02	1 13E+01	1 56E+00	5 49E-01	-2 56E-0:	7 17E+0(	4 78E-00	1 31E-01	3 74E+00	4 21E+00	: 36E+01	2 06E+01	2 29E+01	
	010	38 3	-25 8	7/28/2009	15 04	2 69E+C3	3 87E+C2	2 38E+02	6 37E+00	1 11E+00	3 98E-01	1 90E-01	3 61E+0(	3 45E-00	2 33E-01	3 24E+00	3 70E+00	-3 64E+00	: 79E+01	2 06E+01	
	011	38 3	-25 8	11/11/2009	14 09	2 80E+C3	2 43E+C2	1 55E+02	1 35E+01	1 33E+00	7 32E-01	-1 20E+00	8 67E+0(	8 84E-00	-1 54E+00	1 03E+01	1 07E+01	-3 83E+00	: 49E+01	1 73E+01	
	012	38 3	-25 8	3/3/2010	13 54	2 55E+C3	2 63E+C2	1 75E+02	1 24E+01	1 39E+00	6 53E-01	-9 37E-0:	5 29E+0(	5 81E-00	2 05E-00	5 33E+00	7 62E+00	-9 06E+00	2 03E+01	2 37E+01	
	013	38 3	-25 8	5/6/2010	15 38	3 30E+C3	3 60E+C2	1 70E+02	9 77E+00	1 69E+00	5 74E-01	-1 53E+00	9 44E+0(	1 00E-01	-1 11E+00	7 71E+00	8 22E+00	-1 04E+01	2 13E+01	2 42E+01	
	014	38 3	-25 8	9/9/2010	10 43	3 37E+C3	3 15E+C2	1 22E+02	0 52E+00	1 21E+00	5 59E-01	-9 27E+00	1 08E+01	1 30E 01	-1 39E+00	2 23E+00	3 77E+00	-2 31E+00	: 42E+01	1 69E+01	
	015	38 3	-25 8	11/10/2010	11 49	3 56E+C3	3 09E+C2	3 95E+02	5 43E+00	0 26E-0:	1 10E+00	1 04E+00	3 56E+0(	0 03E 00	2 02E 00	4 33E+00	1 04E+01	-1 03E+00	9 07E+00	2 21E+01	
MW-67-105	001	104 8	-52 3	8/31/2007	12 35	1 86E+C3	5 16E+C2	3 34E+02	1 11E+00	6 12E-0:	5 26E-01	2 26E-01	2 00E+0(	2 00E-00	-3 08E-01	1 63E+00	1 86E+00	NA	NA	NA	MW-67-105
	002	104 8	-52 3	11/1/2007	11 40	2 64E+C3	2 96E+C2	1 95E+02	4 12E-0:	8 28E-0:	9 46E-01	0 00E+00	6 11E+0(	5 77E-00	-4 57E-01	3 63E+00	3 96E+00	: 02E+01	: 58E+01	1 76E+01	
	003	104 8	-52 3	1/11/2008	15 15	2 43E+C3	6 42E+C2	4 15E+02	7 58E-0:	9 98E-0:	1 07E+00	9 22E+00	5 13E+0(	2 83E-00	7 44E-01	3 63E+00	3 70E+00	: 81E+01	2 42E+01	2 67E+01	
	004	104 8	-52 3	2/25/2008	13 44	2 38E+C3	6 89E+C2	5 30E+02	1 13E+00	7 89E-0:	8 12E-01	-1 27E+00	3 25E+0(	3 38E-00	-4 79E-02	2 97E+00	3 25E+00	: 24E+01	: 74E+01	1 93E+01	
	005	104 8	-52 3	7/28/2008	14 25	2 16E+C3	1 40E+C2	1 37E+02	9 63E-0:	3 54E-0:	4 16E-01	4 17E-01	1 59E+0(	2 78E-00	7 65E-01	1 51E+00	2 78E+00	7 25E+00	: 65E+01	2 85E+01	
	006	104 8	-52 3	11/3/2008	14 21	2 93E+C3	4 02E+C2	1 56E+02	1 11E+00	5 50E-0:	4 54E-01	-2 40E-0:	6 36E+0(	7 11E-00	7 75E-02	5 87E+00	7 59E+00	6 32E+00	: 68E+01	1 90E+01	
	007	104 8	-52 3	1/27/2009	16 45	1 96E+C3	2 42E+C2	1 92E+02	4 08E-0:	8 30E-0:	9 49E-01	-1 13E+00	3 32E+0(	2 71E-00	-3 40E-02	2 38E+00	2 66E+00	: 21E+01	: 64E+01	1 81E+01	
	008	104 8	-52 3	4/20/2009	16 00	1 98E+C3	3 15E+C2	1 88E+02	6 30E-0:	6 92E-0:	7 17E-01	-1 78E+00	4 59E+0(	3 76E-00	3 41E-01	3 33E+00	3 92E+00	: 01E+01	: 97E+01	2 20E+01	
	009	104 8	-52 3	7/28/2009	15 15	1 77E+C3	3 30E+C2	2 09E+02	5 33E 0:	4 15E 0:	3 58E 01	1 59E+00	2 65E+0(	3 42E-00	7 22E 01	3 51E+00	3 64E+00	: 17E+01	: 83E+01	2 04E+01	
	010	104 8	-52 3	11/11/2009	14 31	2 12E+C3	3 32E+C2	2 23E+02	8 49E-0:	5 43E-0:	4 35E-01	1 63E-01	5 69E+0(	6 71E 00	4 21E-01	7 52E+00	7 67E+00	-2 17E+00	: 71E+01	1 99E+01	
	011	104 8	-52 3	3/3/2010	14 01	1 59E+C3	2 28E+C2	1 79E+02	5 90E-0:	7 56E-0:	8 05E-01	-2 99E-0:	4 08E+0(	4 38E-00	-1 20E+00	4 14E+00	4 26E+00	-4 03E+00	: 91E+01	2 23E+01	
	012	104 8	-52 3	5/6/2010	15 46	1 54E+C3	2 60E+C2	1 54E+02	1 77E+00	1 91E+00	7 88E-01	4 53E-01	8 63E+0(	9 84E-00	3 51E-00	1 01E+01	1 24E+01	-5 13E+00	2 03E+01	2 46E+01	
	013	104 8	-52 3	8/9/2010	10 37	1 26E+C3	2 10E+C2	1 24E+02	2 51E+00	8 16E-0:	6 26E-01	1 46E+00	6 24E+0(	7 48E-00	1 75E-00	5 73E+00	7 28E+00	9 56E+00	: 69E+01	1 90E+01	
	014	104 8	-52 3	11/10/2010	11 42	1 14E+C3	2 24E+C2	3 95E+02	1 41E+00	8 12E-0:	1 69E+00	-1 68E+00	3 59E+0(	7 64E-00	-3 12E+00	4 14E+00	8 26E+00	: 24E+00	8 56E+00	1 90E+01	
MW-67-173	001	172 3	-159 8	8/31/2007	13 04	1 05E+C3	4 28E+C2	3 37E+02	3 73E-0:	3 77E-0:	4 12E-01	-1 46E+00	3 56E+0(	3 68E-00	1 19E-02	3 75E+00	4 15E+00	NA	NA	NA	MW-67-173
	002	172 3	-159 8	11/1/2007	12 30	1 01E+C3	2 25E+C2	1 95E+02	1 48E-0:	8 52E-0:	1 07E+00	-1 34E+00	3 79E+0(	4 01E-00	2 82E-00	3 25E+00	3 77E+00	4 12E+00	: 71E+01	1 96E+01	
	004	172 3	-159 8	2/25/2008	14 00	9 51E+C2	5 51E+C2	5 30E+02	-4 12E-01	6 06E-0:	7 76E-01	6 65E-01	2 82E+0(	3 23E-00	-3 63E-01	2 54E+00	2 70E+00	-5 95E+00	2 37E+01	2 82E+01	
	005	172 3	-159 8	7/28/2008	14 42	9 19E+C2	1 09E+C2	1 86E+02	1 05E-0:	2 66E-0:	4 35E-01	-1 92E+00	2 66E+0(	3 19E-00	-3 63E-01	2 14E+00	3 49E+00	5 88E+00	: 64E+01	2 84E+01	
	006	172 3	-159 8	11/3/2008	14 37	9 93E+C2	2 58E+C2	1 56E+02	-3 49E-02	2 59E-0:	3 32E-01	-1 41E+00	6 69E+0(	6 32E-00	1 49E-00	5 65E+00	7 65E+00	-1 40E+00	: 69E+01	1 97E+01	
	007	172 3	-159 8	1/27/2009	16 33	7 57E+C2	2 00E+C2	1 22E+02	4 35E 0:	5 34E 0:	6 82E 01	1 51E+00	3 56E+0(	3 90E-00	1 24E+00	2 53E+00	2 73E+00	: 18E+01	: 79E+01	1 96E+01	
	008	172 3	-159 8	4/20/2009	15 30	7 47E+C2	2 28E+C2	1 87E+02	2 33E-0:	6 84E-0:	7 34E-01	-2 70E+00	7 05E+0(	4 70E-00	9 39E-01	3 63E+00	4 24E+00	8 46E+01	2 42E+01	2 47E+01	
	010	172 3	-159 8	7/28/2009	15 24	1 05E+C3	2 76E+C2	2 27E+02	1 59E-0:	5 58E-0:	6 35E-01	6 46E-01	2 51E+0(	3 45E-00	-6 41E-01	3 05E+00	3 17E+00	1 63E-01	: 74E+01	1 99E+01	
	011	172 3	-159 8	11/11/2009	14 50	8 10E+C2	2 46E+C2	2 24E+02	1 67E-0:	6 98E-0:	8 18E-01	2 06E-01	9 81E+0(	6 60E-00	-1 52E+00	5 95E+00	7 53E+00	-2 17E+00	: 86E+01	2 16E+01	

J:\17,000-18,999\17869\17869-92.MGQ\4-2010\FINAL\Tables\;
Table 5 - Historic Groundwater Analytical Results.xlsx;
Table5

See Page 32 for Notes

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	
MW-67-173	012	172.3	-159.8	3/3/2010	14:21	8.70E+02	1.98E+02	1.80E+02	-5.05E-01	5.56E-01	9.10E-01	-3.74E+00	5.64E+00	5.23E-00	3.45E-01	3.84E+00	4.42E+00	-1.67E+00	1.95E+01	2.26E+01	MW-67-173
	013	172.3	-159.8	5/6/2010	16:03	6.78E+02	2.03E+02	1.56E+02	-1.35E-01	4.87E-01	7.07E-01	-3.30E+00	9.64E+00	1.02E-01	-8.48E-01	1.03E+01	1.11E+01	-7.30E+00	2.01E+01	2.37E+01	
	014	172.3	-159.8	8/9/2010	11:07	6.72E+02	1.71E+02	1.27E+02	7.70E-02	4.44E-01	5.35E-01	-7.36E-01	1.34E+01	1.68E-01	6.44E-01	8.97E+00	1.04E+01	-1.44E+00	1.14E+01	1.34E+01	
	015	172.3	-159.8	11/10/2010	12:04	6.25E+02	2.01E+02	3.97E+02	-9.99E-01	6.33E-01	1.86E+00	4.02E-01	7.80E+00	1.12E-01	-1.17E+00	4.83E+00	1.03E+01	-1.65E+00	8.09E+00	1.81E+01	
MW-67-219	001	218.8	-206.3	8/31/2007	13:43	1.25E+03	4.46E+02	3.30E+02	3.27E-02	3.30E-01	3.47E-01	-1.58E-01	3.64E+00	3.32E-00	9.02E-01	3.03E+00	3.68E+00	NA	NA	NA	MW-67-219
	002	218.8	-206.3	11/1/2007	12:53	9.46E+02	2.77E+02	1.95E+02	-2.77E-01	7.50E-01	1.03E+00	1.48E-01	2.60E+00	2.90E-00	1.38E-01	2.37E+00	2.66E+01	2.96E+01			
	004	218.8	-206.3	2/25/2008	11:43	1.23E+03	5.81E+02	5.31E+02	7.61E-02	4.93E-01	6.12E-01	1.33E+00	3.63E+00	3.18E-00	1.08E-00	3.15E+00	3.78E+00	2.23E+01	2.81E+01	2.03E+01	
	005	218.8	-206.3	7/20/2008	11:00	1.17E+03	1.16E+02	1.36E+02	-7.49E-02	2.34E-01	4.35E-01	-2.21E-01	1.10E+00	3.33E-00	-2.64E-01	1.92E+00	3.18E+00	5.99E+00	1.60E+01	2.90E+01	
	006	218.8	-206.3	11/3/2008	11:31	1.37E+03	2.93E+02	1.58E+02	8.76E-02	1.59E-01	1.91E-01	1.12E+00	4.53E+00	5.86E-00	4.03E-00	5.33E+00	8.05E+00	2.36E+00	1.62E+01	1.88E+01	
	007	218.8	-206.3	1/27/2009	12:54	9.68E+02	2.81E+02	2.50E+02	-7.26E-02	3.30E-01	7.13E-01	-3.29E-01	1.09E+00	2.10E-00	7.66E-02	1.83E+00	2.09E+00	1.14E+01	2.16E+01	2.43E+01	
	008	218.8	-206.3	4/20/2009	12:09	1.18E+03	2.63E+02	1.89E+02	3.27E-01	6.53E-01	7.50E-01	-2.03E+00	6.20E+00	4.13E-00	4.77E-01	4.25E+00	4.84E+00	9.52E+00	1.85E+01	2.08E+01	
	009	218.8	-206.3	7/28/2009	11:11	9.22E+02	2.61E+02	2.33E+02	1.81E-01	8.09E-01	9.56E-01	2.89E+00	3.59E+00	4.97E-00	1.63E+00	3.75E+00	4.67E+00	1.14E+01	1.66E+01	1.85E+01	
	010	218.8	-206.3	11/11/2009	11:16	1.44E+03	2.08E+02	2.00E+02	-1.39E-01	6.37E-01	7.36E-01	1.18E+00	4.66E+00	5.82E-00	-4.94E-01	5.25E+00	6.90E+00	6.03E+00	1.74E+01	1.97E+01	
	011	218.8	-206.3	3/3/2010	11:23	1.09E+03	2.07E+02	1.79E+02	3.26E-01	7.37E-01	8.53E-01	-2.20E+00	3.00E+00	3.18E-00	1.81E-00	3.13E+00	3.73E+00	4.96E+00	1.89E+01	2.15E+01	
	012	218.8	-206.3	5/6/2010	11:51	1.20E+03	2.40E+02	1.56E+02	1.78E-01	6.31E-01	7.71E-01	2.27E+00	8.87E+00	1.05E-01	2.35E-00	7.33E+00	9.29E+00	-7.93E+00	1.95E+01	2.31E+01	
	013	218.8	-206.3	8/9/2010	13:33	1.11E+03	2.01E+02	1.75E+02	9.94E-02	5.37E-01	6.41E-01	-7.39E-01	8.14E+00	9.17E-00	-6.19E+00	9.04E+00	8.33E+00	2.32E+00	1.71E+01	1.93E+01	
	014	218.8	-206.3	11/10/2010	13:40	1.15E+03	2.24E+02	3.96E+02	3.53E-01	7.28E-01	1.78E+00	-2.80E-01	3.60E+00	7.62E-00	2.49E-01	3.62E+00	7.89E+00	-4.41E+00	8.84E+00	1.96E+01	
MW-67-276	001	275.3	-262.8	8/31/2007	12:20	6.79E+02	3.83E+02	3.41E+02	3.31E-01	3.57E-01	4.29E-01	1.26E+00	3.52E+00	4.02E-00	9.09E-01	3.75E+00	4.00E+00	NA	NA	NA	MW-67-276
	002	275.3	-262.8	11/1/2007	13:04	1.11E+03	2.30E+02	1.96E+02	3.62E-02	6.36E-01	9.91E-01	-3.32E+00	3.63E+00	3.34E-00	-3.17E-01	3.31E+00	3.31E+00	2.04E-01	1.59E+01	1.84E+01	
	004	275.3	-262.8	2/25/2008	11:48	1.07E+03	5.64E+02	5.29E+02	4.43E-01	7.26E-01	7.38E-01	2.00E+00	3.45E+00	4.21E-00	1.79E-00	4.11E+00	4.33E+00	1.08E+01	1.89E+01	2.11E+01	
	005	275.3	-262.8	7/28/2008	11:09	1.16E+03	1.16E+02	1.36E+02	-5.05E-02	2.76E-01	5.47E-01	-8.94E-01	1.58E+00	3.18E-00	5.52E-01	1.97E+00	3.45E+00	1.52E+00	1.62E+01	2.77E+01	
	006	275.3	-262.8	11/3/2008	11:39	1.18E+03	2.75E+02	1.56E+02	-5.08E-02	1.81E-01	2.16E-01	3.75E-01	5.63E+00	6.29E-00	-7.43E-01	5.03E+00	6.50E+00	7.29E+00	1.73E+01	1.95E+01	
	007	275.3	-262.8	1/27/2009	13:01	1.10E+03	5.12E+02	4.39E+02	3.32E-01	5.93E-01	6.56E-01	2.35E-01	3.24E+00	3.70E-00	-1.19E+00	3.74E+00	3.96E+00	1.15E+01	1.66E+01	1.87E+01	
	008	275.3	-262.8	4/20/2009	12:15	9.46E+02	2.43E+02	1.86E+02	7.29E-03	5.33E-01	6.74E-01	1.18E+00	5.45E+00	3.63E-00	-2.84E-01	3.63E+00	4.04E+00	2.21E+01	2.07E+01	2.28E+01	
	009	275.3	-262.8	7/28/2009	11:15	9.17E+02	2.63E+02	2.34E+02	2.23E-01	3.98E-01	4.46E-01	-6.84E-01	5.00E+00	4.61E-00	2.18E-00	3.71E+00	4.70E+00	7.04E+00	1.76E+01	1.99E+01	
	010	275.3	-262.8	11/11/2009	11:23	1.05E+03	1.88E+02	1.55E+02	2.35E-01	8.09E-01	9.59E-01	9.81E-01	8.21E+00	9.54E-00	4.25E-00	9.15E+00	1.17E+01	1.80E+00	1.66E+01	1.91E+01	
	011	275.3	-262.8	3/3/2010	11:25	1.11E+03	2.10E+02	1.80E+02	-1.30E-01	5.28E-01	8.33E-01	1.09E+00	3.92E+00	4.54E-00	-3.55E+00	3.67E+00	4.49E+00	1.73E+00	1.92E+01	2.21E+01	
	012	275.3	-262.8	5/6/2010	12:20	1.09E+03	2.33E+02	1.55E+02	1.16E-01	5.38E-01	7.17E-01	1.34E+00	7.58E+00	8.70E-00	2.02E-00	9.15E+00	1.09E+01	9.76E+00	2.03E+01	2.27E+01	
	013	275.3	-262.8	8/9/2010	13:36	9.33E+02	1.06E+02	1.22E+02	4.00E-01	4.56E-01	4.70E-01	2.56E+00	7.23E+00	8.00E-00	-2.29E+00	3.22E+00	3.27E+00	9.94E+00	1.20E+01	1.42E+01	
	014	275.3	-262.8	11/10/2010	14:16	1.01E+03	2.18E+02	3.96E+02	-7.85E-01	5.54E-01	1.77E+00	1.94E+00	4.26E+00	9.92E-00	-5.48E+00	4.42E+00	7.40E+00	5.46E+00	8.52E+00	1.89E+01	
MW-67-323	001	322.3	-309.8	8/31/2007	13:20	5.13E+02	1.55E+02	1.57E+02	-2.41E-01	5.26E-01	5.74E-01	1.14E+00	5.71E+00	4.53E+00	1.29E-01	5.78E+00	4.52E+00	NA	NA	NA	MW-67-323
	002	322.3	-309.8	11/1/2007	14:08	1.29E+03	2.40E+02	1.96E+02	5.67E-01	8.58E-01	9.37E-01	-5.77E-01	3.64E+00	3.24E-00	-6.19E-01	3.35E+00	3.58E+00	5.25E-01	1.65E+01	1.92E+01	
	004	322.3	-309.8	2/25/2008	11:59	3.72E+02	2.75E+02	2.87E+02	3.61E-01	7.50E-01	8.52E-01	-2.38E-01	2.57E+00	3.32E-00	1.29E+00	3.53E+00	4.18E+00	6.85E+00	1.88E+01	2.13E+01	
	005	322.3	-309.8	7/28/2008	11:25	3.38E+02	9.08E+01	1.36E+02	-2.30E-01	3.56E-01	7.29E-01	8.29E-01	2.30E+00	3.99E-00	2.24E-01	2.04E+00	3.46E+00	-5.98E+00	1.59E+01	2.86E+01	
	006	322.3	-309.8	11/3/2008	11:44	6.84E+02	2.24E+02	1.54E+02	4.20E-02	3.40E-01	4.37E-01	-3.56E+00	5.21E+00	5.18E-00	4.29E-01	5.12E+00	5.87E+00	-7.38E+00	1.59E+01	1.87E+01	
	007	322.3	-309.8	1/27/2009	13:50	3.65E+02	1.70E+02	1.76E+02	-1.15E-01	4.25E-01	5.35E-01	4.74E-01	3.86E+00	4.42E-00	3.47E-01	3.33E+00	3.86E+00	9.84E+00	1.32E+01	1.47E+01	
	008	322.3	-309.8	4/20/2009	12:20	3.97E+02	1.98E+02	1.87E+02	2.21E-01	7.17E-01	8.23E-01	-5.22E-01	6.66E+00	4.57E-00	-2.70E+00	4.50E+00	4.33E+00	-5.56E+00	2.10E+01	2.43E+01	
	009	322.3	-309.8	7/28/2009	11:25	3.94E+02	2.16E+02	2.37E+02	5.31E-02	3.21E-01	4.37E-01	-1.54E+00	3.31E+00	3.45E-00	7.30E-01	3.72E+00	4.34E+00	2.93E-01	1.79E+01	2.04E+01	
	010	322.3	-309.8	11/11/2009	11:34	4.21E+02	1.62E+02	1.55E+02	-3.92E-01	4.36E-01	7.35E-01	-3.01E+00	0.12E+00	0.50E-00	-1.44E+00	0.13E+00	0.57E+00	2.91E+00	1.52E+01	1.74E+01	
	011	322.3	-309.8	3/3/2010	11:31	4.71E+02	1.00E+02	1.30E+02	3.29E-01	7.45E-01	8.53E-01	-5.70E-01	3.60E+00	4.00E-00	-1.80E-01	3.62E+00	4.06E+00	8.96E+00	1.90E+01	2.21E+01	
	012	322.3	-309.8	5/6/2010	12:30	4.44E+02	1.83E+02	1.57E+02	-1.63E-01	4.58E-01	6.57E-01	-2.50E+00	7.72E+00	7.87E-00	2.57E-01	8.21E+00	9.30E+00	-1.13E+01	1.96E+01	2.33E+01	
	013	322.3	-309.8	8/9/2010	13:23	4.42E+02	1.48E+02	1.23E+02	6.88E-01	6.51E-01	6.53E-01	1.47E+00	6.88E+00	8.02E-00	5.28E-01	5.72E+00	7.56E+00	-4.51E+00	1.51E+01	1.63E+01	
	014	322.3	-309.8	11/10/2010	14:03	3.88E+02	1.09E+02	3.94E+02	1.09E-01	8.21E-01	2.01E+00	2.10E+00	4.61E+00	1.06E-01	3.11E-01	5.07E+00	1.12E+01	-3.22E+00	7.95E+00	1.76E+01	
MW-67-340	001	339.8	-327.3	8/31/2007	12:54	3.69E+02	1.61E+02	1.50E+02	1.69E-01	2.71E-01	3.34E-01	6.52E-01	4.61E+00	5.13E-00	4.53E-00	5.43E+00	5.20E+00	NA	NA	NA	MW-67-340
	002	339.8	-327.3	11/1/2007	14:00	3.90E+02	1.92E+02	1.96E+02	1.42E-01	3.71E-01	4.20E-01	7.29E-01	3.46E+00	3.96E-00	-1.22E+00	3.33E+00	3.50E+00	3.89E+00	1.54E+01	1.76E+01	
	004	339.8	-327.3	2/25/2008	12:00	4.78E+02	2.02E+02	2.86E+02	-2.17E-01	5.53E-01	6.34E-01	-1.58E+00	3.59E+00	3.94E-00	-7.62E-01	3.12E+00	3.43E+00	5.72E+00	1.83E+01	2.09E+01	
	005	339.8	-327.3	7/28/2008	11:18	5.11E+02	9.36E+01	1.30E+02	-3.39E-01	2.28E-01	5.49E-01	3.13E-01	2.21E+00	3.81E-00	9.03E-01	2.25E+00	3.68E+00	-5.94E+00	1.57E+01	2.78E+01	
	006	339.8	-327.3	11/3/2008	11:54	6.69E+02	2.27E+02	1.53E+02	8.00E-02	4.76E-01	5.43E-01	2.23E+00	6.25E+00	7.45E-00	3.65E-00	5.79E+00	8.47E+00	-8.34E+00	1.59E+01	1.88E+01	
	007	339.8	-327.3	1/27/2009	12:44	5.23E+02	1.37E+02	1.39E+02	2.57E-01	5.48E-01	6.31E-01	4.72E-01	3.72E+00	4.19E-00	1.00E-01	3.41E+00	3.67E+00	7.78E+00	1.68E+01	1.90E+01	
	008	339.8	-327.3	4/20/2009	12:25	4.96E+02	2.07E+02	1.30E+02	4.35E-01	5.54E-01	6.35E-01	3.10E+00	7.19E+00	4.79E-00	-1.37E-01	3.53E+00	3.03E+00	8.03E+00	2.05E+01	2.25E+01	
	009	339.8	-327.3	7/28/2009	11:20	4.70E+02	2.23E+02	2.38E+02	2.02E-01	6.29E-01	7.30E-01	5.88E-01	3.75E+00	4.34E-00	-3.76E-01	3.03E+00	3.30E+00	-6.23E-01	1.89E+01	2.16E+01	
	010	339.8	-327.3	11/11/2009	11:28	5.87E+02	1.68E+02	1.55E+02	-2.17E-01	7.77E-01	9.54E-01	-3.30E-01	5.65E+00	6.15E-00	2.49E-00	5.65E+00	8.53E+00	-2.81E+00	1.42E+01	1.77E+01	
	011	339.8	-327.3	3/3/2010	11:49	5.97E+02	1.85E+02	1.79E+02	1.19E-01	5.37E-01	6.26E-01	4.02E-01	4.41E+00	5.05E-00	2.42E-00	4.83E+00	5.86E+00	2.20E+00	1.91E+01	2.15E+01	
	012	339.8	-327.3	5/6/2010	12:24	6.57E+02	2.00E+02	1.55E+02	-2.13E-01	4.56E-01	7.31E-01	-2.61E+00	7.77E+00	8.17E-00	3.62E-01	8.73E+00	1.00E+01	-5.47E+00	1.94E+01	2.28E+01	
	013	339.8	-327.3	8/9/2010	13:20	4.86E+02	1.55E+02	1.25E+02	-3.81E-02	5.00E-01	6.29E-01	1.20E+00	7.44E+00	8.75E-00	-2.42E+00	5.93E+00	7.06E+00	2.60E+00	1.45E+01	1.67E+01	
	014	339.8	-327.3	11/10/2010	13:53	5.31E+02	1.97E+02	3.95E+02	-8.93E-01	5.00E-01	1.64E+00	1.72E+00	4.50E+00	1.03E-01	-2.57E+00	3.93E+00	7.25E+00	2.25E+00	8.84E+00	1.97E+01	
MW-107	004	32.7	110.1	9/28/2005	12:00	3.09E+02	3.87E+02	4.20E+02	NA	NA	NA	3.86E+00	1.16E+01	8.53E-00	NA	NA	NA	NA	NA	NA	MW-107
	001	32.7	110.1	12/8/2005	11:15	1.28E+02	4.11E+02	4.54E+02	7.45E+01	1.13E+01	1.13E+01	2.45E+00	7.64E+00	5.59E-00	4.11E-00	1.28E+01	8.97E+00	NA	NA	NA	
	002	32.7	110.1	4/18/2006	11:15	1.27E+02	4.11E+02	4.51E+02	0.00E+00	3.90E-01	4.40E-01	2.65E+00	7.54E+00	5.62E-00	4.35E-00	1.31E+01	8.21E+00	NA	NA	NA	
	003	32.7	110.1	6/6/2006	13:30	1.05E+02	1.53E+02	1.56E+02	2.07E-01	5.43E-01	7.13E-01	1.65E+00	8.31E+00	9.24E-00	3.66E-01	8.35E+00	9.05E+00	NA	NA	NA	
	005	32.7	110.1	7/23/2007	14:18	8.92E+01	1.52E+02	1.70E+02	1.60E-01	5.19E-01	5.87E-01	8.13E-01	2.73E+00	1.60E-00	1.03E-01	1.41E+00	1.60E+00	NA	NA	NA	
	006	32.7	110.1	4/24/2008	15:41	1.91E+02	8.90E+01	1.44E+02	-6.22E-02	2.21E-01	4.42E-01	-2.03E+00	2.78E+00	4.11E-00	-1.38E+00	2.12E+00	3.07E+00	NA	NA	NA	
	007	32.7	110.1	5/30/2008	15:25	4.62E+01	9.02E+01	1.38E+02	6.62E-02	5.51E-01	9.50E-01	1.12E+00	1.88E+00	5.36E-00	5.48E-01	2.23E+00	3.57E+00	NA	NA	NA	
	008	32.7	110.1	4/22/2009	12:30	1.96E+02	1.71E+02	1.86E+02	9.02E-03	4.34E-01	5.52E-01	-2.11E-01	3.66E+00	2.57E-00	1.54E-00	2.61E+00	3.19E+00	NA	NA	NA	

J:\17,000-18,999\17869\17869-92.MGQ\4-2010\FINAL\Tables\;
Table 5 - Historic Groundwater Analytical Results.xlsx;
Table5

See Page 32 for Notes

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	
MW-107	009	32.7	110.1	4/22/2010	10:11	9.67E+01	1.64E+02	1.83E+02	-7.61E-02	5.23E-01	6.74E-01	9.25E-01	6.08E+00	6.99E-00	-1.88E+00	7.25E+00	7.56E+00	NA	NA	NA	MW-107
MW-108	003	8.3	6.2	9/29/2005	12:00	3.32E+02	3.84E+02	4.20E+02	NA	NA	NA	3.23E+00	9.70E+00	7.39E-00	3.21E-00	9.64E+00	7.84E+00	NA	NA	NA	MW-108
	004	8.3	6.2	11/3/2005	12:00	1.97E+02	4.26E+02	4.76E+02	NA	NA	NA	3.41E+00	1.02E+01	7.53E-00	2.65E-00	7.95E+00	6.39E+00	NA	NA	NA	
	002	8.3	6.2	5/13/2006	10:53	2.78E+02	1.82E+02	1.58E+02	6.89E-01	8.26E-01	8.38E-01	3.12E+00	8.66E+00	1.05E-01	-1.45E-01	1.23E+01	1.34E+01	NA	NA	NA	
MW-109	003	8.5	6.1	9/29/2005	12:00	1.54E+02	3.81E+02	4.20E+02	NA	NA	NA	3.74E+00	1.12E+01	8.45E-00	3.19E-00	9.57E+00	7.88E+00	NA	NA	NA	MW-109
	004	8.5	6.1	11/3/2005	17:00	1.01E+02	4.73E+02	4.76E+02	NA	NA	NA	3.59E+00	1.08E+01	7.89E-00	2.59E-00	7.73E+00	6.26E+00	NA	NA	NA	
	002	8.5	6.1	5/13/2006	10:10	3.39E+02	1.89E+02	1.70E+02	2.98E-01	8.24E-01	9.27E-01	2.00E-01	5.68E+00	6.24E-00	2.50E+00	5.12E+00	6.08E+00	NA	NA	NA	
MW-111	001	15.5	2.4	9/29/2005	10:00	2.15E+05	2.26E+03	4.20E+02	NA	NA	NA	4.40E+00	1.24E+01	1.02E-01	1.01E-00	5.42E+00	5.57E+00	NA	NA	NA	MW-111
	001	15.5	2.4	9/29/2005	10:00	2.05E+05	2.56E+04	6.24E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	002	15.5	2.4	10/14/2005	10:00	6.81E+03	4.73E+03	6.41E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	003	15.5	2.4	10/21/2005	10:00	2.84E+05	3.05E+04	6.41E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	004	15.5	2.4	10/28/2005	8:30	2.18E+05	6.54E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	005	15.5	2.4	11/4/2005	9:00	3.02E+05	9.06E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	006	15.5	2.4	11/22/2005	10:00	1.80E+05	5.40E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	007	15.5	2.4	12/2/2005	10:15	1.25E+05	3.75E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	008	15.5	2.4	12/8/2005	16:40	2.71E+05	8.13E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	009	15.5	2.4	12/15/2005	11:00	2.96E+05	8.88E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	010	15.5	2.4	12/19/2005	9:15	1.92E+05	5.76E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	011	15.5	2.4	12/29/2005	10:00	2.12E+05	6.36E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	012	15.5	2.4	1/6/2006	10:45	1.13E+05	3.39E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	013	15.5	2.4	1/13/2006	10:30	1.99E+05	5.97E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	014	15.5	2.4	1/20/2006	9:30	1.19E+05	3.57E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	015	15.5	2.4	1/27/2006	10:05	5.78E+05	1.73E+02	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	016	15.5	2.4	2/3/2006	12:20	2.95E+05	3.09E+04	6.33E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	017	15.5	2.4	2/7/2006	16:10	2.38E+05	2.78E+04	6.37E+02	1.17E+00	6.33E-01	6.31E-01	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	018	15.5	2.4	2/16/2006	13:40	2.94E+05	3.09E+04	6.36E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	019	15.5	2.4	3/3/2006	9:00	2.36E+05	7.08E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	020	15.5	2.4	3/7/2006	9:50	1.45E+05	4.35E+03	7.00E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	021	15.5	2.4	5/17/2006	14:05	4.31E+04	6.51E+03	9.10E+02	2.49E+00	1.40E+00	1.24E+00	-2.32E-01	1.24E+01	1.51E-01	4.25E-00	1.33E+01	1.49E+01	NA	NA	NA	
	022	15.5	2.4	6/23/2006	8:35	2.62E+05	3.92E+04	2.35E+03	6.23E-01	1.07E+00	1.32E+00	-4.18E+00	1.40E+01	1.46E-01	-1.60E-01	1.38E+01	1.52E+01	NA	NA	NA	
	023	15.5	2.4	9/21/2006	10:25	1.59E+05	2.07E+04	1.42E+03	8.79E-01	1.25E+00	1.33E+00	9.00E-02	1.13E+01	1.26E-01	-6.26E-02	1.13E+01	1.24E+01	NA	NA	NA	
	024	15.5	2.4	6/15/2007	14:17	1.19E+05	3.69E+03	3.52E+02	9.74E-01	6.30E-01	5.76E-01	-7.53E-01	3.27E+00	3.00E-00	1.21E-01	2.79E+00	3.17E+00	6.34E+00	1.26E+01	1.43E+01	
	025	15.5	2.4	8/3/2007	9:53	9.88E+04	2.93E+03	3.58E+02	9.74E-01	6.73E-01	6.27E-01	4.24E-01	2.75E+00	3.15E-00	3.55E-01	2.63E+00	3.02E+00	NA	NA	NA	
	026	15.5	2.4	1/28/2008	11:38	4.77E+04	1.77E+03	2.97E+02	2.56E+00	9.45E-01	6.18E-01	2.60E+00	4.05E+00	3.90E-00	-6.32E-01	2.55E+00	2.63E+00	1.35E+01	1.56E+01	1.73E+01	
	027	15.5	2.4	9/4/2008	14:00	7.39E+04	1.89E+03	5.47E+02	1.32E+00	3.52E-01	4.21E-01	-8.16E-01	2.22E+00	3.61E-01	NA	NA	NA	NA	NA	NA	
	028	15.5	2.4	10/21/2008	14:20	6.64E+04	2.00E+03	2.50E+02	9.08E-01	9.32E-01	9.72E-01	-9.35E-01	3.60E+00	3.79E-00	5.10E-01	4.32E+00	5.03E+00	NA	NA	NA	
	029	15.5	2.4	4/30/2009	12:36	3.89E+04	1.38E+03	1.71E+02	2.17E+00	8.97E-01	7.57E-01	1.51E+00	1.04E+01	6.92E-00	-3.30E+00	5.45E+00	6.44E+00	NA	NA	NA	
	030	15.5	2.4	11/2/2009	15:48	2.26E+04	6.93E+02	1.80E+02	8.46E-01	5.72E-01	5.25E-01	5.61E-02	5.51E+00	6.73E-00	-1.39E-01	5.92E+00	7.69E+00	NA	NA	NA	
	031	15.5	2.4	2/2/2010	14:27	2.63E+04	1.94E+03	4.29E+02	1.37E+00	5.50E-01	4.40E-01	1.87E+00	3.42E+00	4.27E-00	-1.55E-01	3.93E+00	4.40E+00	NA	NA	NA	
	032	15.5	2.4	4/21/2010	14:40	3.35E+04	1.07E+03	1.91E+02	1.40E+00	7.26E-01	6.20E-01	6.79E+00	6.54E+00	4.32E-00	1.70E-00	4.37E+00	5.10E+00	NA	NA	NA	
	033	15.5	2.4	8/27/2010	15:21	3.86E+04	1.13E+03	1.28E+02	6.44E-01	8.37E-01	8.55E-01	-8.83E-01	6.30E+00	6.59E-00	1.88E-00	5.72E+00	6.84E+00	NA	NA	NA	
	034	15.5	2.4	9/10/2010	14:09	4.69E+04	1.51E+03	1.40E+02	1.30E+00	1.00E+00	8.12E-01	-5.04E+00	6.84E+00	6.88E-00	-5.62E-01	5.84E+00	6.62E+00	NA	NA	NA	
	035	15.5	2.4	11/1/2010	14:55	4.59E+04	1.34E+03	1.27E+02	3.47E-01	5.90E-01	6.50E-01	-1.99E-01	5.63E+00	6.38E-00	5.49E-00	5.91E+00	7.75E+00	NA	NA	NA	
U3-4D	007	25.6	-10.8	10/16/2005	12:00	3.70E+02	4.05E+02	4.38E+02	NA	NA	NA	4.72E+00	1.41E+01	1.01E-01	3.72E-00	1.12E+01	8.50E+00	NA	NA	NA	U3-4D
	008	25.6	-10.8	10/21/2005	12:00	3.99E+02	3.90E+02	4.27E+02	NA	NA	NA	3.11E+00	9.34E+00	6.58E-00	2.98E-00	8.95E+00	6.58E+00	NA	NA	NA	
	009	25.6	-10.8	10/28/2005	12:00	4.05E+02	4.29E+02	4.72E+02	NA	NA	NA	3.91E+00	1.17E+01	8.54E-00	4.35E-00	1.31E+01	9.84E+00	NA	NA	NA	
	012	25.6	-10.8	11/18/2005	12:00	1.10E+02	4.35E+02	4.81E+02	NA	NA	NA	3.04E+00	9.13E+00	6.67E-00	2.04E-00	5.11E+00	4.97E+00	NA	NA	NA	
	013	25.6	-10.8	12/2/2005	17:00	2.73E+02	4.23E+02	4.54E+02	NA	NA	NA	2.97E+00	8.92E+00	6.62E-00	2.00E-00	5.01E+00	5.05E+00	NA	NA	NA	
	001	25.6	-10.8	12/15/2005	13:10	3.99E+02	4.32E+02	4.70E+02	NA	NA	NA	2.73E+00	8.20E+00	6.05E-00	2.88E-00	8.61E+00	6.66E+00	NA	NA	NA	
	002	25.6	-10.8	12/30/2005	9:25	4.42E+02	4.35E+02	4.71E+02	NA	NA	NA	3.53E+00	1.06E+01	7.76E-00	3.95E-00	1.18E+01	8.99E+00	NA	NA	NA	
	003	25.6	-10.8	1/12/2006	11:00	5.73E+02	4.38E+02	4.72E+02	NA	NA	NA	3.29E+00	9.86E+00	7.12E-00	3.42E-00	1.03E+01	7.75E+00	NA	NA	NA	
	004	25.6	-10.8	2/15/2006	13:45	2.71E+02	4.35E+02	6.36E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	006	25.6	-10.8	4/26/2006	14:20	5.75E+02	2.19E+02	1.87E+02	-1.48E-01	6.11E-01	7.91E-01	-3.01E-01	8.38E+00	9.11E-00	-3.10E+00	8.21E+00	8.71E+00	NA	NA	NA	
	014	25.6	-10.8	6/22/2006	10:20	7.10E+02	2.15E+02	1.58E+02	1.27E-01	5.73E-01	7.39E-01	-2.41E+00	1.15E+01	1.21E-01	-2.08E+00	8.42E+00	8.34E+00	NA	NA	NA	
	015	25.6	-10.8	2/1/2008	12:40	3.75E+02	1.36E+02	1.35E+02	-1.78E-01	7.83E-01	9.77E-01	2.83E-01	2.69E+00	3.10E-00	1.41E-00	3.25E+00	3.97E+00	NA	NA	NA	
	016	25.6	-10.8	4/29/2008	13:27	3.19E+02	1.43E+02	2.22E+02	1.44E-01	2.76E-01	4.34E-01	5.15E-01	1.51E+00	3.36E-00	-1.53E-01	1.73E+00	2.91E+00	NA	NA	NA	
	017	25.6	-10.8	7/28/2008	16:46	4.66E+02	2.50E+02	3.79E+02	-3.57E-01	4.96E-01	9.31E-01	2.89E-01	2.08E+00	3.62E-00	4.78E-01	2.35E+00	3.69E+00	NA	NA	NA	
	018	25.6	-10.8	10/20/2008	14:40	5.68E+02	1.71E+02	1.54E+02	-8.59E-02	8.61E-01	1.11E+00	3.53E-01	4.69E+00	5.17E-00	7.12E-01	4.18E+00	4.79E+00	NA	NA	NA	
	010	25.6	-10.8	11/4/2008	12:00	1.18E+02	4.23E+02	4.76E+02	NA	NA	NA	3.17E+00	9.51E+00	6.90E-00	3.34E-00	1.03E+01	7.54E+00	NA	NA	NA	
	011	25.6	10.8	11/10/2008	12:00	3.16E+02	4.14E+02	4.51E+02	NA	NA	NA	4.10E+00	1.23E+01	8.95E-00	4.07E-00	1.22E+01	9.11E+00	NA	NA	NA	
	019	25.6	-10.8	2/10/2009	14:15	4.82E+02	2.31E+02	1.97E+02	1.00E-01	5.16E-01	6.41E-01	3.86E-01	2.60E+00	3.00E-00	7.38E-01	2.02E+00	3.39E+00	NA	NA	NA	
	020	25.6	-10.8	4/17/2009	15:37	3.82E+02	1.83E+02	1.89E+02	-1.17E-01	3.51E-01	5.11E-01	-9.57E-01	6.52E+00	4.61E-00	4.61E-01	3.32E+00	3.82E+00	NA	NA	NA	
	021	25.6	-10.8	8/5/2009	14:06	4.82E+02	1.88E+02	1.39E+02	-1.59E-01	5.17E-01	7.34E-01	-2.04E+00	5.45E+00	5.08E-00	1.95E-00	5.65E+00	6.65E+00	NA	NA	NA	
	022	25.6	-10.8	11/6/2009	13:15	4.73E+02	1.28E+02	1.06E+02	-8.06E-02	5.49E-01	6.58E-01	1.02E+00	5.64E+00	6.77E-00	3.35E-01	5.22E+00	7.03E+00	NA	NA	NA	

See Page 32 for Notes

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	
U3-4D	023	25 6	-10 8	2/12/2010	14 15	8 65E+C2	1 85E+C2	1 77E+02	-1 60E-02	6 20E-0:	7 36E-01	7 :5E-01	3 15E+00	3 69E-00	1 91E-00	3 65E+00	4 34E+00	NA	NA	NA	U3-4D
	024	25 6	-10 8	4/12/2010	12 49	1 07E+C3	2 06E+C2	1 77E+02	-4 68E-02	5 46E-0:	7 39E-01	-5 85E+00	9 33E+00	8 95E-00	-2 13E+00	8 04E+00	7 89E+00	NA	NA	NA	
	025	25 6	-10 8	7/23/2010	13 21	6 84E+C2	1 86E+C2	1 77E+02	-1 56E-01	4 50E-0:	6 46E-01	2 21E+00	7 56E+00	8 91E-00	-1 01E+00	7 61E+00	8 14E+00	NA	NA	NA	
	026	25 6	-10 8	10/28/2C10	14 04	7 12E+C2	1 68E+C2	1 13E+02	2 26E-0:	4 89E-0:	5 51E-01	2 75E+00	5 75E+00	6 97E-00	1 33E-00	7 82E+00	9 00E+00	NA	NA	NA	
U3-4S	001	NA	NA	7/23/2010	14 12	3 74E+C2	1 74E+C2	1 79E+02	3 76E-0:	4 15E-0:	4 21E-01	9 00E-01	8 51E+00	9 30E-00	1 89E-00	7 75E+00	9 37E+00	NA	NA	NA	U3-4S
	002	NA	NA	10/29/2C10	11 40	3 51E+C2	1 37E+C2	1 10E+02	3 86E-0:	5 82E-0:	6 43E-01	1 64E+00	5 49E+00	6 57E-00	-2 02E+00	5 91E+00	6 14E+00	NA	NA	NA	
U3-T1	007	5 7	2 8	12/7/2005	12 00	1 59E+C3	4 20E+C2	4 15E+02	NA	NA	NA	2 51E+00	8 14E+00	6 09E-00	2 77E-00	8 32E+00	6 55E+00	NA	NA	NA	U3-T1
	008	5 7	2 8	10/21/2C05	12 00	3 09E+C2	3 07E+C2	4 27E+02	NA	NA	NA	3 52E+00	1 10E+01	0 66E 00	3 07E 00	1 15E+01	2 03E+00	NA	NA	NA	
	009	5 7	2 8	10/28/2C05	12 00	3 40E+C2	4 29E+C2	4 72E+02	NA	NA	NA	3 :5E+00	1 06E+01	8 06E-00	3 39E-00	1 61E+01	1 23E+01	NA	NA	NA	
	010	5 7	2 8	11/4/2005	12 00	1 97E+C2	4 29E+C2	4 76E+02	NA	NA	NA	4 01E+00	1 20E+01	8 86E-00	3 93E-00	1 17E+01	2 13E+00	NA	NA	NA	
	011	5 7	2 8	1/10/2C05	12 00	5 63E+C2	4 26E+C2	4 51E+02	NA	NA	NA	3 11E+00	9 32E+00	6 89E-00	2 97E-00	8 92E+00	6 99E+00	NA	NA	NA	
	012	5 7	2 8	1/18/2C05	12 00	0 00E+C0	4 29E+C2	4 81E+02	NA	NA	NA	3 90E+00	1 17E+01	8 39E-00	3 43E-00	1 02E+01	7 71E+00	NA	NA	NA	
	013	5 7	2 8	12/2/2005	12 00	4 98E+C2	4 29E+C2	4 54E+02	NA	NA	NA	2 80E+00	8 39E+00	6 23E-00	2 94E-00	8 83E+00	6 86E+00	NA	NA	NA	
	001	5 7	2 8	12/15/2C05	13 15	3 40E+C2	4 29E+C2	4 70E+02	NA	NA	NA	2 53E+00	7 60E+00	5 63E-00	2 89E-00	8 67E+00	6 65E+00	NA	NA	NA	
	002	5 7	2 8	12/30/2C05	10 40	5 29E+C2	4 38E+C2	4 71E+02	NA	NA	NA	4 02E+00	1 21E+01	8 71E-00	4 07E-00	1 22E+01	9 17E+00	NA	NA	NA	
	003	5 7	2 8	1/12/2006	9 50	7 87E+C2	4 47E+C2	4 72E+02	NA	NA	NA	3 10E+00	9 31E+00	6 88E-00	2 83E-00	8 49E+00	6 70E+00	NA	NA	NA	
	004	5 7	2 8	2/15/2006	13 15	8 35E+C2	1 65E+C3	6 36E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	005	5 7	2 8	3/16/2006	11 50	1 26E+C3	2 79E+C2	1 85E+02	6 55E 0:	8 13E 0:	8 29E 01	1 06E+00	5 49E+00	6 18E-00	1 81E 01	5 63E+00	6 14E+00	NA	NA	NA	
	006	5 7	2 8	5/26/2006	13 30	7 32E+C2	2 33E+C2	1 89E+02	1 27E+00	1 02E+00	1 01E+00	1 21E+00	8 34E+00	9 42E-00	3 99E-00	8 95E+00	1 15E+01	NA	NA	NA	
	014	5 7	2 8	7/12/2006	12 50	6 84E+C2	2 36E+C2	1 98E+02	3 36E-0:	1 36E+00	1 44E+00	1 15E+00	1 13E+01	1 18E-01	-1 14E+00	1 13E+01	1 26E+01	NA	NA	NA	
	015	5 7	2 8	8/15/2006	11 30	7 66E+C2	2 25E+C2	1 73E+02	NA	NA	NA	-4 04E+00	6 82E+00	6 33E-00	-2 15E+00	5 84E+00	8 29E+00	NA	NA	NA	
	016	5 7	2 8	6/12/2007	12 54	5 06E+C2	4 25E+C2	4 39E+02	6 25E-0:	8 75E-0:	9 54E-01	-8 51E-02	2 54E+00	2 22E-00	7 17E-01	2 03E+00	2 33E+00	-1 46E+00	1 40E+01	1 63E+01	
	017	5 7	2 8	8/1/2007	13 20	4 90E+C2	3 38E+C2	2 73E+02	5 21E-02	5 13E-0:	6 47E-01	8 49E-01	3 57E+00	4 15E-00	2 88E-01	3 42E+00	3 92E+00	NA	NA	NA	
	018	5 7	2 8	10/22/2007	16 13	5 30E+C2	4 01E+C2	4 21E+02	3 41E-0:	5 49E-0:	6 39E-01	-1 08E+00	3 44E+00	3 64E-00	-1 34E+00	3 52E+00	3 68E+00	NA	NA	NA	
	019	5 7	2 8	1/22/2008	16 11	6 05E+C2	3 15E+C2	2 97E+02	6 43E-0:	7 41E-0:	7 79E-01	1 11E+00	2 75E+00	3 21E-00	2 38E-01	2 51E+00	2 75E+00	1 14E+01	1 65E+01	1 84E+01	
	019	5 7	2 8	1/22/2008	16 11	7 29E+C2	3 27E+C2	2 96E+02	6 26E-0:	7 26E-0:	7 59E-01	1 21E+00	3 14E+00	3 76E-00	-1 79E-01	3 55E+00	3 93E+00	8 87E+00	1 85E+01	2 09E+01	
	020	5 7	2 8	5/2/2008	15 24	7 09E+C2	1 63E+C2	2 22E+02	7 24E-0:	5 19E-0:	8 26E-01	2 85E-01	1 54E+00	3 19E-00	-1 15E+00	1 87E+00	2 82E+00	NA	NA	NA	
	021	5 7	2 8	7/23/2008	11 16	5 56E+C2	2 58E+C2	3 79E+02	6 40E 0:	5 19E 0:	8 87E 01	2 41E+00	2 54E+00	4 18E-00	6 54E 01	2 41E+00	4 01E+00	NA	NA	NA	
	022	5 7	2 8	10/20/2008	10 19	5 09E+C2	5 63E+C2	5 21E+02	7 01E-0:	5 47E-0:	5 30E-01	2 51E+00	6 27E+00	7 46E 00	1 51E 00	5 24E+00	7 35E+00	NA	NA	NA	
	023	5 7	2 8	1/28/2009	12 00	6 75E+C2	2 48E+C2	2 24E+02	1 34E+00	7 47E-0:	7 44E-01	-1 33E+00	3 59E+00	2 90E-00	-6 63E-01	2 32E+00	2 48E+00	NA	NA	NA	
	024	5 7	2 8	4/10/2009	13 22	5 28E+C2	1 65E+C2	1 49E+02	3 23E-0:	6 59E-0:	7 51E-01	1 68E-01	6 03E+00	4 02E-00	1 24E-00	5 32E+00	4 14E+00	NA	NA	NA	
	025	5 7	2 8	7/14/2009	11 08	3 99E+C2	2 36E+C2	2 32E+02	4 77E-02	7 47E-0:	8 86E-01	2 51E+00	5 24E+00	5 65E-00	9 47E-01	3 72E+00	4 45E+00	NA	NA	NA	
	026	5 7	2 8	1/13/2C09	16 35	3 79E+C2	1 18E+C2	1 33E+02	3 87E-0:	5 95E-0:	6 53E-01	-6 81E-0:	5 33E+00	5 76E-00	1 33E-00	5 33E+00	7 37E+00	NA	NA	NA	
	027	5 7	2 8	2/10/2010	12 02	4 76E+C2	1 73E+C2	1 78E+02	2 19E-0:	6 55E-0:	7 38E-01	-1 28E+00	6 23E+00	5 80E-00	2 78E-00	3 74E+00	4 78E+00	NA	NA	NA	
	028	5 7	2 8	5/5/2010	16 54	5 00E+C2	1 79E+C2	1 84E+02	6 43E-02	4 95E-0:	5 97E-01	-3 25E+00	8 58E+00	1 04E-01	-8 61E-01	5 62E+00	7 16E+00	NA	NA	NA	
	029	5 7	2 8	7/26/2010	12 15	3 84E+C2	1 74E+C2	1 78E+02	1 20E-02	3 21E-0:	4 29E-01	5 07E+00	7 63E+00	9 77E-00	-6 61E-01	5 95E+00	7 49E+00	NA	NA	NA	
	030	5 7	2 8	10/29/2C10	16 04	3 04E+C2	1 28E+C2	1 10E+02	4 04E-02	6 36E-0:	7 30E-01	-8 56E-0:	6 64E+00	6 70E-00	1 59E-00	5 73E+00	6 79E+00	NA	NA	NA	
U3-T2	012	5 7	2 6	12/7/2005	12 00	7 03E+C2	3 93E+C2	4 15E+02	NA	NA	NA	3 67E+00	1 10E+01	8 06E-00	4 13E-00	1 24E+01	9 39E+00	NA	NA	NA	U3-T2
	013	5 7	2 6	10/21/2C05	12 00	1 47E+C3	3 63E+C2	4 27E+02	NA	NA	NA	3 33E+00	1 00E+01	7 23E 00	3 00E 00	2 00E+00	6 90E+00	NA	NA	NA	
	014	5 7	2 6	10/28/2C05	12 00	1 20E+C3	4 56E+C2	4 72E+02	NA	NA	NA	3 44E+00	1 03E+01	7 67E 00	4 23E 00	1 23E+01	9 09E+00	NA	NA	NA	
	015	5 7	2 6	11/4/2005	12 00	1 19E+C3	4 59E+C2	4 76E+02	NA	NA	NA	3 41E+00	1 02E+01	7 53E-00	3 85E-00	1 18E+01	8 8.E+00	NA	NA	NA	
	016	5 7	2 6	1/10/2C05	12 00	1 64E+C3	4 59E+C2	4 51E+02	NA	NA	NA	3 81E+00	1 14E+01	8 34E-00	3 98E-00	1 14E+01	9 09E+00	NA	NA	NA	
	017	5 7	2 6	1/18/2C05	12 00	1 13E+C3	4 65E+C2	4 81E+02	NA	NA	NA	3 97E+00	1 19E+01	8 70E-00	4 15E-00	1 25E+01	9 55E+00	NA	NA	NA	
	018	5 7	2 6	12/2/2005	12 00	1 33E+C3	4 56E+C2	4 64E+02	NA	NA	NA	2 31E+00	6 52E+00	5 23E-00	2 58E-00	7 74E+00	6 1.E+00	NA	NA	NA	
	001	5 7	2 6	12/15/2C05	13 30	1 29E+C3	4 62E+C2	4 70E+02	NA	NA	NA	2 77E+00	8 30E+00	6 09E-00	2 85E-00	8 55E+00	6 57E+00	NA	NA	NA	
	002	5 7	2 6	12/30/2C05	10 50	1 69E+C3	4 74E+C2	4 71E+02	NA	NA	NA	3 81E+00	1 14E+01	8 46E-00	3 49E-00	1 05E+01	8 3.E+00	NA	NA	NA	
	003	5 7	2 6	1/6/2006	8 45	2 42E+C3	4 92E+C2	4 56E+02	NA	NA	NA	2 86E+00	8 57E+00	6 56E-00	4 04E-00	1 21E+01	9 38E+00	NA	NA	NA	
	004	5 7	2 6	1/13/2006	13 20	1 78E+C3	4 77E+C2	4 72E+02	NA	NA	NA	4 01E+00	1 20E+01	8 74E-00	3 41E-00	1 07E+01	7 94E+00	NA	NA	NA	
	005	5 7	2 6	1/20/2006	11 00	1 75E+C3	4 56E+C2	4 51E+02	NA	NA	NA	3 70E+00	1 02E+01	7 71E-00	3 27E-00	9 82E+00	7 99E+00	NA	NA	NA	
	006	5 7	2 6	1/25/2006	11 10	2 32E+C3	4 06E+C2	4 51E+02	NA	NA	NA	3 96E+00	1 19E+01	8 77E 00	3 17E 00	9 52E+00	7 64E+00	NA	NA	NA	
	007	5 7	2 6	2/1/2006	11 15	2 13E+C3	4 80E+C2	4 50E+02	NA	NA	NA	3 17E+00	9 21E+00	7 02E-00	3 47E-00	1 04E+01	7 99E+00	NA	NA	NA	
	009	5 7	2 6	2/11/2006	9 20	1 92E+C3	2 50E+C2	6 36E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	010	5 7	2 6	3/16/2006	12 00	1 69E+C3	3 36E+C2	2 24E+02	5 07E-0:	9 21E-0:	1 00E+00	-7 43E-0:	6 36E+00	6 83E-00	-1 22E-01	5 33E+00	6 88E+00	NA	NA	NA	
	011	5 7	2 6	5/26/2006	13 15	1 90E+C3	3 86E+C2	2 48E+02	1 49E+00	1 11E+00	1 01E+00	1 64E+00	1 01E+01	1 22E-01	5 67E-00	9 43E+00	1 25E+01	NA	NA	NA	
	019	5 7	2 6	7/12/2006	12 25	1 83E+C3	3 78E+C2	2 54E+02	7 24E-0:	1 72E+00	1 80E+00	2 28E+00	6 50E+00	8 07E-00	1 30E-00	5 69E+00	7 74E+00	NA	NA	NA	
	020	5 7	2 6	8/15/2006	10 30	1 58E+C3	7 79E+C2	7 72E+02	NA	NA	NA	-8 87E-0:	7 17E+00	7 64E-00	3 29E-00	9 13E+00	1 14E+01	NA	NA	NA	
	021	5 7	2 6	6/12/2007	9 25	1 45E+C3	5 19E+C2	4 36E+02	-3 89E-01	7 25E-0:	9 59E-01	2 03E-01	2 29E+00	2 54E-00	-1 00E-01	2 42E+00	2 74E+00	5 88E+00	1 35E+01	1 57E+01	
	022	5 7	2 6	8/1/2007	14 14	1 25E+C3	4 62E+C2	2 55E+02	-4 84E-02	5 37E-0:	7 11E-01	-1 75E+00	3 23E+00	3 20E-00	1 99E-02	3 54E+00	4 00E+00	NA	NA	NA	
	023	5 7	2 6	10/22/2007	15 07	1 17E+C3	4 76E+C2	4 32E+02	2 36E-01	5 28E-0:	6 38E-01	-7 13E-02	2 62E+00	3 11E-00	2 53E-00	3 53E+02	3 8:.E+00	NA	NA	NA	
	024	5 7	2 6	1/22/2008	16 16	1 33E+C3	3 83E+C2	2 27E+02	4 31E 01	8 54E 0:	9 53E 01	7 39E 01	2 57E+00	3 39E-00	1 14E+00	3 32E+00	2 86E+00	2 78E+00	1 65E+01	1 89E+01	
	025	5 7	2 6	5/2/2008	14 44	1 02E+C3	1 77E+C2	2 22E+02	6 52E-01	3 31E-0:	4 70E-01	5 80E-01	2 60E+00	3 33E-00	7 90E-01	1 63E+00	3 00E+00	NA	NA	NA	
	026	5 7	2 6	7/23/2008	13 40	9 97E+C2	2 83E+C2	3 64E+02	3 90E-01	3 19E-0:	8 44E-01	3 57E-02	1 72E+00	2 93E-00	-1 02E+00	2 44E+00	3 39E+00	NA	NA	NA	
	027	5 7	2 6	10/20/2008	10 36	9 28E+C2	5 97E+C2	5 90E+02	4 75E-0:	4 95E-0:	4 85E-01	-4 58E-0:	4 82E+00	5 51E-00	-5 02E+00	5 54E+00	6 06E+00	NA	NA	NA	
	028	5 7	2 6	1/28/2009	11 40	1 11E+C3	2 87E+C2	2 24E+02	6 04E-0:	6 41E-0:	6 75E-01	7 10E-01	2 42E+00	2 74E-00	4 09E-01	2 32E+00	2 61E+00	NA	NA	NA	

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	Result	Std. Dev.[3]	MDC	
U3-T2	029	57	26	4/24/2009	11 24	1 03E+C3	4 97E+C2	4 14E+02	1 76E+00	6 54E-0:	4 11E-01	1 62E+00	6 65E+00	4 43E-00	3 29E-01	4 15E+00	4 69E+00	NA	NA	NA	U3-T2
	030	57	26	7/14/2009	13 04	1 12E+C3	2 94E+C2	2 30E+02	5 50E-0:	8 51E-0:	9 58E-01	1 31E-01	3 69E+00	4 23E-00	-6 32E-01	3 72E+00	4 05E+00	NA	NA	NA	
	031	57	26	1:/16/2C09	12 53	8 94E+C2	1 52E+C2	1 33E+02	3 24E-0:	6 54E-0:	7 43E-01	3 94E-01	6 63E+00	6 48E-00	-2 09E+00	5 95E+00	6 93E+00	NA	NA	NA	
	032	57	26	2/11/2010	12 43	9 41E+C2	1 88E+C2	1 78E+02	5 85E-0:	7 72E-0:	8 17E-01	-8 36E-0:	3 38E+00	3 63E-00	7 20E-02	3 71E+00	4 10E+00	NA	NA	NA	
	033	57	26	5/7/2010	13 05	9 75E+C2	1 95E+C2	1 83E+02	6 31E-0:	6 31E-0:	6 38E-01	-2 27E+00	5 70E+00	5 99E-00	-1 66E+00	5 62E+00	6 97E+00	NA	NA	NA	
	034	57	26	7/26/2010	14 26	8 76E+C2	1 97E+C2	1 74E+02	5 34E-0:	6 12E-0:	6 47E-01	-7 17E+00	7 60E+00	7 69E-00	2 22E-00	7 21E+00	8 84E+00	NA	NA	NA	
	035	57	26	10/29/2C10	11 22	1 47E+C3	2 19E+C2	1 11E+02	4 22E 0:	6 79E 0:	7 56E 01	6 11E 02	5 42E+00	6 11E-00	3 03E-00	5 47E+00	6 89E+00	NA	NA	NA	
U1-CBS	001	14	C 1	1/30/2007	11 45	1 76E+C3	6 00E+C2	5 70E+02	1 25E+01	2 12E+00	1 70E+00	7 00E-01	1 32E+00	1 40E 00	-3 20E-01	1 33E+00	1 60E+00	1 64E+01	2 67E+01	2 90E+01	U1-CBS
	002	14	C 1	2/27/2007	11 24	4 32E+C3	6 90E+C2	5 70E+02	1 38E+01	2 31E+00	2 10E+00	1 11E+00	1 55E+00	2 10E-00	7 00E-01	1 92E+00	2 20E+00	-1 39E+00	2 35E+01	2 90E+01	
	003	14	C 1	6/13/2007	11 57	1 53E+C3	5 23E+C2	4 35E+02	1 43E+01	1 91E+00	6 64E-01	8 50E-01	3 57E+00	4 15E-00	2 82E-00	4 23E+00	4 93E+00	4 44E+00	2 92E+01	2 22E+01	
	004	14	C 1	8/6/2007	15 55	2 80E+C3	2 81E+C2	1 95E+02	2 58E+01	2 33E+00	5 71E-01	2 53E+00	4 30E+00	4 61E-00	2 48E-00	5 84E+00	4 17E+00	NA	NA	NA	
	005	14	C 1	1/15/2008	14 54	4 95E+C2	2 04E+C2	1 76E+02	7 73E+00	1 31E+00	6 91E-01	2 85E+00	6 56E+00	3 36E-00	-6 88E-02	3 33E+00	3 71E+00	NA	NA	NA	
	006	14	C 1	4/23/2008	15 25	1 77E+C3	1 96E+C2	1 44E+02	6 74E+00	9 31E-0:	7 19E-01	-1 36E+00	2 12E+00	3 20E-00	-7 61E-01	2 03E+00	3 16E+00	NA	NA	NA	
	007	14	C 1	5/12/2008	14 05	6 88E+C2	1 35E+C2	1 42E+02	4 33E+00	8 35E-0:	9 25E-01	2 59E+00	2 30E+00	4 25E-00	3 09E-01	2 53E+00	3 96E+00	-2 18E+00	1 19E+01	2 08E+01	
	008	14	C 1	9/8/2008	10 24	1 45E+C3	3 77E+C2	4 98E+02	9 38E+00	9 40E-0:	5 43E-01	1 90E+00	2 07E+00	3 76E-00	NA	NA	NA	NA	NA	NA	
	009	14	C 1	11/6/2008	14 48	2 66E+C3	3 86E+C2	1 56E+02	6 74E+00	1 10E+00	5 43E-01	3 42E+00	6 01E+00	7 09E-00	-1 64E+00	5 45E+00	6 67E+00	1 02E+01	1 67E+01	1 89E+01	
	010	14	C 1	1:/19/2C08	13 50	2 20E+C3	2 33E+C2	1 52E+02	9 38E+00	1 30E+00	5 30E-01	2 25E+00	4 04E+00	4 98E-00	8 56E-01	4 63E+00	5 37E+00	NA	NA	NA	
	011	14	C 1	3/18/2009	13 05	1 57E+C3	5 36E+C2	3 81E+02	1 11E+01	2 04E+00	9 24E 01	2 00E+00	5 53E+00	3 95E-00	2 86E 01	3 03E+00	3 42E+00	5 46E 01	1 94E+01	2 22E+01	
	012	14	C 1	4/21/2009	13 07	3 28E+C3	3 87E+C2	1 91E+02	3 26E+01	2 64E+00	7 19E-01	3 79E-01	5 28E+00	3 22E-00	1 33E-00	3 02E+00	3 74E+00	1 79E+01	1 92E+01	2 11E+01	
	013	14	C 1	10/26/2C09	14 07	2 91E+C3	2 81E+C2	1 86E+02	1 75E+01	1 38E+00	5 38E-01	-1 10E-0:	5 54E+00	6 71E-00	-4 56E+00	5 91E+00	5 17E+00	0 00E+00	2 04E+01	2 34E+01	
	014	14	C 1	5/3/2010	15 58	1 88E+C3	2 79E+C2	1 70E+02	8 52E+00	1 81E+00	8 42E-01	4 61E-01	5 57E+00	6 66E-00	3 94E-00	5 22E+00	6 88E+00	-1 72E+01	2 18E+01	2 55E+01	
	015	14	C 1	11/8/2010	14 56	2 26E+C3	2 72E+C2	1 26E+02	1 18E+01	1 45E+00	6 34E-01	2 29E+00	5 61E+00	5 93E-00	2 07E-00	5 61E+00	6 70E+00	3 16E-01	1 81E+01	2 13E+01	
U1-NCD	001	NA	NA	5/8/2008	9 45	9 50E+C3	3 49E+C2	1 96E+02	3 27E+02	2 38E+00	3 57E-01	NA	NA	NA	NA	NA	NA	NA	NA	NA	U1-NCD
	002	NA	NA	10/15/2C08	12 35	6 19E+C3	3 71E+C2	1 51E+02	4 35E+02	5 39E+00	3 33E-01	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	003	NA	NA	1/12/2009	13 45	2 13E+C3	2 48E+C2	1 92E+02	4 54E+02	8 90E+00	6 51E-01	2 84E+04	2 63E+03	1 22E-01	7 66E-01	2 37E+00	2 80E+00	6 41E+02	4 11E+01	1 89E+01	
	004	NA	NA	4/13/2009	12 15	5 21E+C3	5 18E+C2	1 35E+02	3 22E+02	7 74E+00	8 42E-01	2 10E+04	2 66E+01	1 77E-01	2 72E-00	4 45E+00	5 13E+00	5 09E+02	6 05E+01	4 30E+01	
	005	NA	NA	7/13/2009	12 30	2 66E+C3	3 86E+C2	2 28E+02	1 40E+02	4 98E+00	5 34E-01	1 58E+04	1 56E+03	1 39E-01	7 71E-01	3 71E+00	4 30E+00	3 91E+02	2 72E+01	2 12E+01	
	006	NA	NA	10/12/2C09	9 10	3 11E+C3	2 90E+C2	1 88E+02	8 37E+01	3 94E+00	5 22E 01	1 52E+0:	9 50E+02	1 60E-01	1 07E-00	5 39E+00	7 72E+00	3 13E+02	3 09E+01	2 30E+01	
	007	NA	NA	1/4/2010	9 30	5 47E+C3	3 40E+C2	1 31E+02	6 40E+01	3 33E+00	4 39E-01	1 14E+04	1 50E+03	6 64E 00	0 50E-01	2 52E+00	2 89E+00	2 31E+02	2 05E+01	2 15E+01	
	008	NA	NA	7/15/2010	9 10	1 35E+C4	4 41E+C2	1 58E+02	3 06E+01	3 21E+00	7 39E-01	1 14E+04	1 42E+03	1 40E-01	7 51E-01	5 21E+00	6 03E+00	2 90E+02	3 39E+01	2 40E+01	
	009	NA	NA	10/20/2,10	13 40	5 54E+C3	3 23E+C2	1 27E+02	3 38E+01	2 31E+00	6 39E-01	1 10E+04	1 47E+03	9 98E-00	-1 14E+00	4 95E+00	5 42E+00	2 51E+02	3 19E+01	2 23E+01	
U1-SFDS	001	NA	NA	4/9/2008	8 55	6 28E+C2	1 41E+C2	1 97E+02	9 38E+00	4 86E-0:	4 31E-01	NA	NA	NA	NA	NA	NA	NA	NA	NA	U1-SFDS
	002	NA	NA	5/8/2008	9 10	8 81E+C2	1 50E+C2	1 96E+02	1 40E+01	5 18E-0:	3 59E-01	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	003	NA	NA	10/15/2C08	12 45	1 09E+C3	1 79E+C2	1 57E+02	1 35E+01	1 56E+00	4 56E-01	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	004	NA	NA	1/14/2009	9 15	3 11E+C2	1 82E+C2	1 93E+02	1 22E+01	1 67E+00	8 15E-01	6 39E+00	3 47E+00	2 22E-00	1 03E-00	1 91E+00	2 27E+00	7 26E+00	1 62E+01	1 83E+01	
	005	NA	NA	4/13/2009	12 30	1 52E+C3	2 96E+C2	1 37E+02	4 33E+01	3 03E+00	6 15E-01	8 09E+00	5 57E+00	3 91E-00	2 45E-00	3 83E+00	4 79E+00	-9 47E+00	1 92E+01	2 30E+01	
	006	NA	NA	7/15/2009	8 30	7 33E+C2	2 73E+C2	2 39E+02	3 54E+01	2 67E+00	4 79E-01	9 41E+00	7 41E+00	3 60E-00	-9 93E-02	4 44E+00	4 64E+00	5 10E+00	2 14E+01	2 44E+01	
	007	NA	NA	10/14/2C09	9 50	7 04E+C2	1 98E+C2	1 88E+02	2 31E+01	2 31E+00	5 30E-01	1 22E+01	8 32E+00	6 38E-00	6 69E-01	5 83E+00	6 69E+00	-5 49E+00	1 69E+01	1 97E+01	
	008	NA	NA	1/6/2010	9 50	5 10E+C2	1 03E+C2	1 31E+02	1 25E+01	1 46E+00	4 47E-01	8 10E+00	4 67E+00	2 90E 00	-5 94E-01	2 91E+00	3 18E+00	-2 06E+00	1 04E+01	2 15E+01	
	009	NA	NA	7/7/2010	9 45	6 44E+C2	1 30E+C2	1 45E+02	1 30E+01	2 10E+00	6 32E-01	2 69E+01	1 26E+01	7 40E 00	1 64E 00	7 91E+00	9 44E+00	3 42E+00	2 24E+01	2 50E+01	
	010	NA	NA	10/20/2C10	8 45	4 82E+C2	1 56E+C2	1 26E+02	1 17E+01	1 33E+00	8 74E-01	7 99E+00	7 54E+00	5 78E-00	-8 31E-01	5 24E+00	5 67E+00	9 7.E-01	1 86E+01	2 18E+01	
1-2	001	NA	NA	8/2/2010	14 59	6 21E+C1	1 54E+C2	1 75E+02	-2 56E-01	3 72E-0:	5 25E-01	7 04E+00	7 80E+00	1 02E-01	9 54E-02	5 54E+00	7 19E+00	NA	NA	NA	1-2
	002	NA	NA	1:/17/2C10	14 25	1 74E+C2	1 71E+C2	3 78E+02	2 25E-01	6 25E-0:	1 50E+00	-4 50E-0:	5 64E+00	1 10E-01	3 35E-00	5 94E+00	1 40E+01	NA	NA	NA	
RW-1	001	107 5	-30	10/25/2C06	11 37	6 41E+C4	4 88E+C3	8 52E+02	-8 44E-01	1 29E+00	1 52E+00	9 50E-01	4 75E+00	5 45E-00	8 01E-01	4 62E+00	5 32E+00	NA	NA	NA	RW-1
	002	107 5	-30	10/25/2C06	14 15	2 95E+C4	2 28E+C3	5 85E+02	3 10E-0:	8 79E-0:	9 23E-01	1 99E+00	5 23E+00	5 98E-00	4 31E-01	4 74E+00	5 22E+00	NA	NA	NA	
	004	107 5	-30	10/31/2C06	15 55	2 63E+C4	2 04E+C3	5 51E+02	-1 06E+00	1 15E+00	1 39E+00	-2 26E-0:	3 66E+00	3 99E-00	-6 22E-03	2 85E+00	3 21E+00	NA	NA	NA	
	005	107 5	-30	10/31/2C06	20 00	1 89E+C4	1 49E+C3	4 73E+02	9 06E-0:	1 15E+00	1 14E+00	5 93E-01	4 51E+00	5 21E-00	1 65E-00	5 31E+00	6 60E+00	NA	NA	NA	
	003	107 5	-30	10/31/2C06	17 27	1 07E+C5	8 06E+C3	1 10E+03	-3 70E-01	9 51E-0:	1 09E+00	7 10E-01	4 33E+00	4 71E-00	7 34E-01	3 04E+00	3 67E+00	NA	NA	NA	
	006	107 5	30	11/1/2C06	12 00	1 84E+C4	1 45E+C3	4 56E+02	3 64E 0:	1 03E+00	1 08E+00	3 39E+00	4 14E+00	3 90E-00	5 25E 01	4 01E+00	1 19E+00	NA	NA	NA	
	007	107 5	-30	11/2/2C06	12 00	2 40E+C4	2 13E+C3	1 20E+03	1 50E-0:	6 30E-0:	6 70E-01	1 12E+00	2 37E+00	2 60E 00	-6 50E-01	2 37E+00	2 90E+00	NA	NA	NA	
	008	107 5	-30	11/3/2C06	9 30	3 06E+C4	2 34E+C3	1 30E+03	4 80E-0:	7 20E-0:	7 30E-01	-1 03E+00	2 19E+00	2 60E-00	8 20E-01	2 42E+00	2 70E+00	NA	NA	NA	
MH-5 WCPL	001	NA	NA	6/25/2007	12 15	1 41E+C3	2 53E+C2	1 87E+02	-3 26E-01	6 21E-0:	9 20E-01	-9 51E-0:	3 40E+00	3 60E-00	6 59E-02	3 15E+00	3 49E+00	NA	NA	NA	MH-5 WCPL
	002	NA	NA	8/10/2007	15 15	1 17E+C3	5 21E+C2	4 56E+02	3 17E-02	7 84E-0:	9 38E-01	-5 40E-0:	3 17E+00	2 87E-00	-8 50E-01	2 84E+00	2 93E+00	NA	NA	NA	
	003	NA	NA	10/26/2C07	13 30	1 62E+C3	2 30E+C2	1 84E+02	1 60E-0:	6 06E-0:	7 10E-01	2 15E-01	2 64E+00	2 95E-00	-6 20E-01	2 93E+00	3 06E+00	NA	NA	NA	
	004	NA	NA	1/16/2008	12 30	9 28E+C2	2 45E+C2	1 77E+02	4 62E-0:	8 33E-0:	9 37E-01	5 23E-01	2 78E+00	3 09E-00	5 57E-01	2 55E+00	2 90E+00	NA	NA	NA	
	005	NA	NA	6/3/2C09	14 45	1 20E+C3	1 95E+C2	1 52E+02	-5 27E-01	6 72E-0:	8 48E-01	3 34E+00	9 21E+00	6 14E-00	7 60E-01	4 83E+00	5 73E+00	NA	NA	NA	
	006	NA	NA	8/24/2009	10 15	1 50E+C3	2 46E+C2	2 18E+02	5 16E-0:	5 54E-0:	5 97E-01	8 69E-02	5 58E+00	6 23E-00	2 70E-00	5 51E+00	7 43E+00	NA	NA	NA	
	007	NA	NA	1:/16/2C09	11 10	6 28E+C2	1 39E+C2	1 07E+02	3 95E-0:	6 57E-0:	7 36E-01	-5 36E-0:	1 07E+01	1 17E-01	2 75E-00	5 29E+00	7 70E+00	NA	NA	NA	
	008	NA	NA	2/19/2010	13 46	2 08E+C2	1 59E+C2	1 71E+02	6 25E-02	3 27E-0:	4 38E-01	-1 18E+00	4 41E+00	4 80E-00	-1 51E+00	4 11E+00	4 15E+00	NA	NA	NA	
	009	NA	NA	5/17/2010	10 15	4 33E+C2	1 73E+C2	1 79E+02	3 66E 0:	5 84E 0:	6 18E 01	2 13E+00	6 00E+00	7 18E-00	1 52E 01	5 63E+00	7 65E+00	NA	NA	NA	
	010	NA	NA	8/3/2010	14 45	7 32E+C2	1 89E+C2	1 77E+02	5 37E-0:	5 37E-0:	5 34E-01	7 26E-01	7 72E+00	8 69E-00	-2 26E+00	5 93E+00	7 07E+00	NA	NA	NA	
	011	NA	NA	8/30/2010	13 30	9 96E+C3	5 48E+C2	1 26E+02	1 22E-0:	3 21E-0:	3 31E-01	1 10E+00	3 38E+00	6 48E-00	8 08E-01	5 31E+00	7 50E+00	NA	NA	NA	
	012	NA	NA	9/10/2010	15 30	8 80E+C2	1 89E+C2	1 25E+02	3 60E-0:	6 35E-0:	7 11E-01	7 21E-01	6 45E+00	7 44E-00	1 23E-00	5 71E+00	6 85E+00	NA	NA	NA	
	013	NA	NA	1:/24/2C10	11 10	4 60E+C2	1 86E+C2	1 47E+02	1 36E-0:	7 57E-0:	8 35E-01	1 75E+00	3 45E+00	4 02E-00	5 48E-01	3 77E+00	4 28E+00	NA	NA	NA	

See Page 32 for Notes

TABLE 5
HISTORIC GROUNDWATER ANALYTICAL RESULTS
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID[1]	SAMPLE ID	SAMPLE ZONE CENTER, depth ft below top of casing[2]	SAMPLE ZONE CENTER, elevation ft msl[2]	SAMPLE COLLECTION		ANALYSIS RESULTS															Well ID[1]
						TRITIUM (pCi/L)			Sr-90 (pCi/L)			Cs-137 (pCi/L)			Co-60 (pCi/L)			Ni-63 (pCi/L)			
				Date	Time	Result	Std. Dev.[8]	MDC	Result	Std. Dev.[8]	MDC	Result	Std. Dev.[8]	MDC	Result	Std. Dev.[8]	MDC	Result	Std. Dev.[8]	MDC	
LAF-002	001	NA	-22 3	6/6/2006	12 47	5 20E+01	1 71E+02	1 83E+02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	LAF-002
	001	NA	-22 3	6/6/2006	12 47	3 98E+01	3 60E+02	6 98E+02	1 38E+00	1 35E+00	1 93E+00	-3 88E+00	1 53E+00	1 59E−00	-2 24E+00	1 25E+01	1 34E+01	-2 04E-01	2 13E+01	2 34E+01	
	003	NA	-22 3	9/19/2006	13 14	-4 71E+01	1 50E+02	1 70E+02	-5 08E-01	8 90E-01	1 07E+00	6 45E-02	9 05E+00	1 01E−00	-2 76E+00	5 35E+00	4 99E+00	NA	NA	NA	
	004	NA	-22 3	12/4/2006	13 38	-1 20E+01	1 62E+02	1 50E+02	-1 20E-01	7 80E-01	8 50E-01	NA	NA	NA	9 00E-01	5 43E+00	6 30E+00	-2 50E+00	7 20E+00	8 10E+00	
	005	NA	-22 3	3/7/2007	14 45	-8 30E+01	1 56E+02	1 50E+02	8 20E-01	1 30E+00	1 60E+00	3 10E+00	4 80E+00	5 10E−00	-1 20E+00	5 43E+00	7 30E+00	NA	NA	NA	
	006	NA	-22 3	6/7/2007	13 18	-6 85E+00	1 33E+02	1 54E+02	3 19E-01	6 20E-01	6 79E-01	7 80E-01	2 63E+00	3 04E−00	6 55E-01	2 63E+00	3 04E+00	NA	NA	NA	
	007	NA	22 3	10/9/2007	9 35	7 46E+01	1 37E+02	1 55E+02	4 43E 0:	4 98E 0:	5 18E 01	5 15E 0:	2 10E+00	1 69E−00	1 44E+00	1 73E+00	1 39E+00	NA	NA	NA	
	008	NA	-22 3	12/4/2007	10 50	9 00E+01	1 46E+02	1 52E+02	4 09E-0:	6 20E-0:	6 82E-01	-6 21E-0:	4 59E+00	4 37E 00	-2 25E+00	3 72E+00	3 39E+00	NA	NA	NA	
	009	NA	-22 3	4/10/2008	0 00	4 65E+01	8 46E+01	1 44E+02	4 73E-0:	3 32E-0:	4 36E-01	1 91E+00	2 14E+00	3 93E−00	1 61E−00	2 43E+00	4 56E+00	NA	NA	NA	
	010	NA	-22 3	10/1 /2008	10 32	8 19E+01	1 55E+02	1 74E+02	4 05E-0:	7 70E-0:	9 01E-01	2 36E-01	2 76E+00	3 16E−00	-3 09E-02	3 02E+00	3 46E+00	-3 61E+00	2 01E+01	2 35E+01	
	011	NA	-22 3	4/21/2009	14 24	1 80E+02	1 77E+02	1 89E+02	1 77E-0:	5 70E-0:	6 58E-01	-1 74E+00	5 54E+00	3 96E−00	3 37E-01	3 99E+00	4 50E+00	2 34E+00	1 92E+01	2 15E+01	
	012	NA	-22 3	1 /19/2009	12 35	-7 51E+01	1 40E+02	1 55E+02	-1 84E-02	5 43E-0:	7 29E-01	4 01E-01	8 51E+00	1 02E−01	6 99E−00	9 51E+00	1 27E+01	2 20E+00	1 47E+01	1 68E+01	
	013	NA	-22 3	5/11/2010	13 44	-4 21E+01	1 32E+02	1 53E+02	6 55E-0:	7 37E-0:	7 78E-01	-1 49E+00	6 50E+00	7 60E−00	1 64E−00	5 03E+00	7 34E+00	-5 88E+00	2 21E+01	2 54E+01	
	014	NA	-22 3	1 /22/2010	14 41	1 02E+02	1 13E+02	1 21E+02	1 96E-0:	4 52E-0:	5 40E-01	-6 13E-0:	6 13E+00	6 83E−00	-1 60E+00	5 83E+00	6 15E+00	3 65E+00	1 75E+01	2 05E+01	
B-1	001	NA	NA	6/29/2007	12 35	7 93E+02	2 07E+02	1 89E+02	-3 833-01	6 75E-0:	9 30E-01	0 00E+00	7 04E+00	4 44E−00	-9 13E-01	3 33E+00	3 40E+00	NA	NA	NA	B-1
	002	NA	NA	8/14/2007	11 30	1 10E+03	2 25E+02	1 90E+02	1 29E-0:	5 93E-0:	7 38E-01	0 00E+00	6 71E+00	3 93E−00	9 64E-01	3 54E+00	4 16E+00	NA	NA	NA	
	003	NA	NA	10/22/2007	14 49	1 10E+03	4 68E+02	4 21E+02	-1 56E-01	3 72E-0:	5 51E-01	1 48E+01	5 82E+00	3 82E−00	1 33E−00	3 23E+00	3 53E+00	NA	NA	NA	
	004	NA	NA	1/22/2008	13 08	2 27E+02	1 61E+02	1 71E+02	1 29E 0:	5 00E 0:	6 12E 01	3 13E 01	2 54E+00	2 83E−00	9 76E 02	2 72E+00	3 01E+00	NA	NA	NA	
	005	NA	NA	4/18/2008	18 25	1 17E+03	1 27E+02	2 01E+02	-1 14E-01	3 81E-0:	7 32E-01	2 00E+01	3 70E+00	3 07E−00	-2 48E-01	1 73E+00	2 97E+00	NA	NA	NA	
	006	NA	NA	6/3/2009	13 30	8 81E+02	1 83E+02	1 52E+02	7 01E-02	7 39E-0:	9 15E-01	9 21E+00	1 11E+01	7 41E−00	-3 25E+00	5 23E+00	5 86E+00	NA	NA	NA	
	007	NA	NA	2/23/2010	14 10	1 49E+03	2 13E+02	1 59E+02	4 61E-02	3 30E-0:	3 30E-01	4 15E+00	5 45E+00	6 44E−00	-6 69E-01	7 14E+00	5 88E+00	NA	NA	NA	
	008	NA	NA	4/23/2010	16 44	8 15E+02	1 91E+02	1 85E+02	2 22E-0:	5 20E-0:	6 38E-01	9 59E+00	7 51E+00	6 38E−00	5 59E-01	5 24E+00	7 21E+00	NA	NA	NA	
	009	NA	NA	8/17/2010	15 40	1 40E+04	6 48E+02	1 27E+02	1 25E-0:	6 43E-0:	7 91E-01	2 27E+01	1 06E+01	5 87E−00	2 95E−00	5 03E+00	7 45E+00	NA	NA	NA	
	010	NA	NA	1 /17/2010	11 10	2 37E+03	2 72E+02	3 86E+02	6 87E-0:	7 58E-0:	1 72E+00	1 89E+01	6 46E+00	7 93E−00	8 39E-01	4 32E+00	9 74E+00	NA	NA	NA	
B-6	001	NA	NA	7/5/2007	9 30	4 03E+02	1 67E+02	1 59E+02	1 01E-0:	4 97E-0:	5 57E-01	1 29E+00	3 46E+00	4 04E−00	1 09E−00	3 51E+00	4 15E+00	NA	NA	NA	B-6
	002	NA	NA	8/14/2007	8 30	5 46E+01	1 68E+02	1 92E+02	-3 06E-01	6 20E-0:	8 32E-01	5 63E-01	2 57E+00	3 42E−00	-2 88E+00	3 31E+00	2 35E+00	NA	NA	NA	
	003	NA	NA	10/22/2007	11 30	1 07E+03	1 70E+02	1 90E+02	-7 54E-02	4 44E-0:	5 33E-01	2 59E+00	2 33E+00	3 04E−00	1 04E−00	2 43E+00	3 05E+00	NA	NA	NA	
	004	NA	NA	1/16/2008	16 50	1 72E+02	2 04E+02	1 79E+02	1 05E 0:	7 35E 0:	8 33E 01	3 96E+00	4 41E+00	3 32E−00	1 29E−00	3 15E+00	3 66E+00	NA	NA	NA	
	005	NA	NA	4/25/2008	14 15	5 23E+01	8 45E+01	1 43E+02	-1 20E-01	2 59E-0:	5 25E-01	-2 30E-0:	1 56E+00	3 24E 00	-7 50E-01	3 43E+00	4 21E+00	NA	NA	NA	
	006	NA	NA	6/3/2009	9 40	1 08E+02	1 46E+02	1 53E+02	1 71E-0:	7 38E-0:	8 14E-01	1 50E-01	1 19E+01	7 94E−00	1 25E−00	5 79E+00	6 80E+00	NA	NA	NA	
	007	NA	NA	2/19/2010	9 56	5 78E+02	1 65E+02	1 58E+02	1 14E-02	3 57E-0:	4 39E-01	1 43E+00	4 13E+00	4 84E−00	2 21E-01	3 93E+00	4 24E+00	NA	NA	NA	
	008	NA	NA	5/18/2010	9 40	4 48E+01	1 62E+02	1 84E+02	-1 02E-01	4 47E-0:	5 71E-01	5 39E-01	5 58E+00	6 34E−00	2 39E-01	5 53E+00	6 27E+00	NA	NA	NA	
	009	NA	NA	8/5/2010	13 43	1 49E+02	1 62E+02	1 79E+02	1 12E-0:	8 02E-0:	9 78E-01	2 52E+00	6 57E+00	8 03E−00	-9 21E-02	8 23E+00	9 37E+00	NA	NA	NA	
	010	NA	NA	11/8/2010	11 45	1 05E+02	1 33E+02	1 43E+02	1 43E-0:	6 50E-0:	7 58E-01	0 00E+00	5 04E+00	6 20E−00	-3 20E-01	4 73E+00	5 29E+00	NA	NA	NA	

Notes

1 For nested multi-level monitoring wells, suffix of well ID indicates depth (rounded to nearest foot) from reference point on casing to bottom of well screen. For Waterloo multi-level systems, suffix indicates depth (rounded to nearest foot) from reference point on casing to top of sampling port. Well IDs without a suffix are open bedrock wellbores

2 Sampling depths within sampling intervals (location of pump intake) have been established at location of most transmissive zone to the extent possible

3 NA indicates that the constituent was not analyzed

4 Current well identifications are shown for each location. Minor name changes have been made based on altered transducer installations

5 Dot pattern denotes sampling interval is positioned within overburden soils. Open box indicates sampling interval is in bedrock

6 At monitoring well U3T1, sample IDs 019-B, 019-D, and 019-S were collected for laboratory and field QAQC (B=Blind, D=Duplicate, S-Split). Only the duplicate sample results were included in the calculations for rolling averages

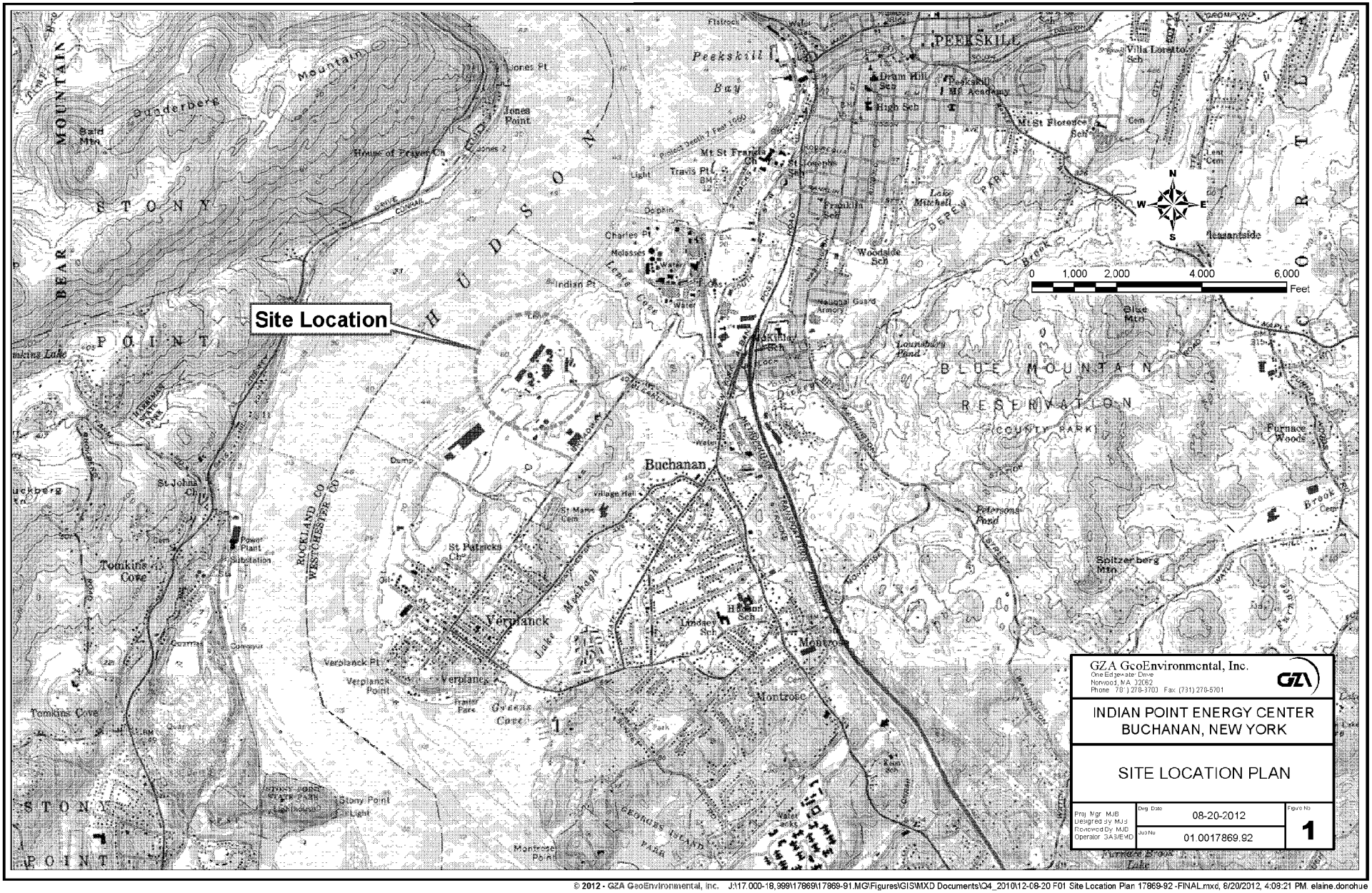
7 These locations are storm drains, not monitoring wells

8 Column designated as "Std. Dev." provides the three times 1 sigma uncertainty values

See Page 32 for Notes

FIGURES

IPEC00266301



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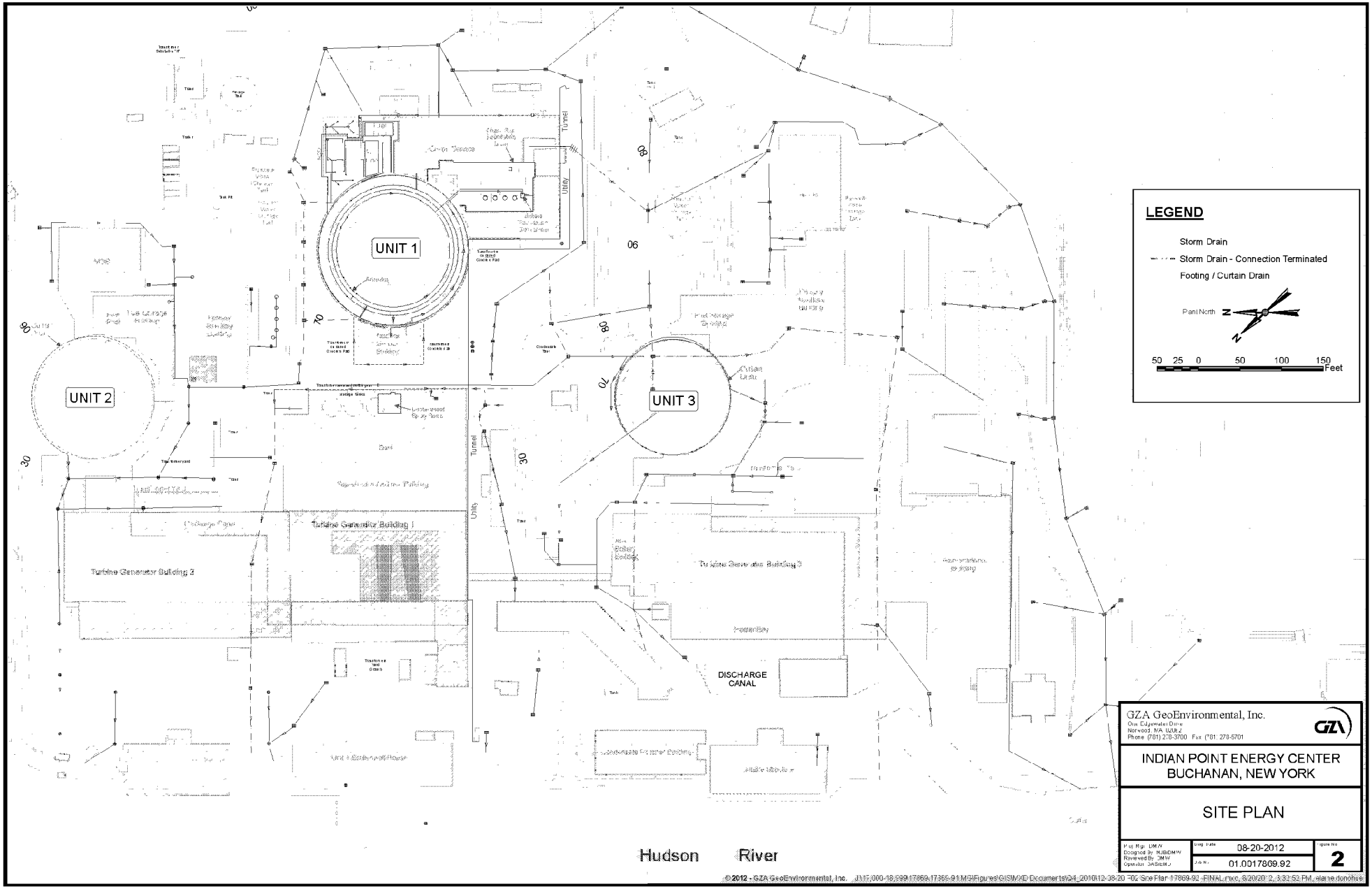
IPEC00266302



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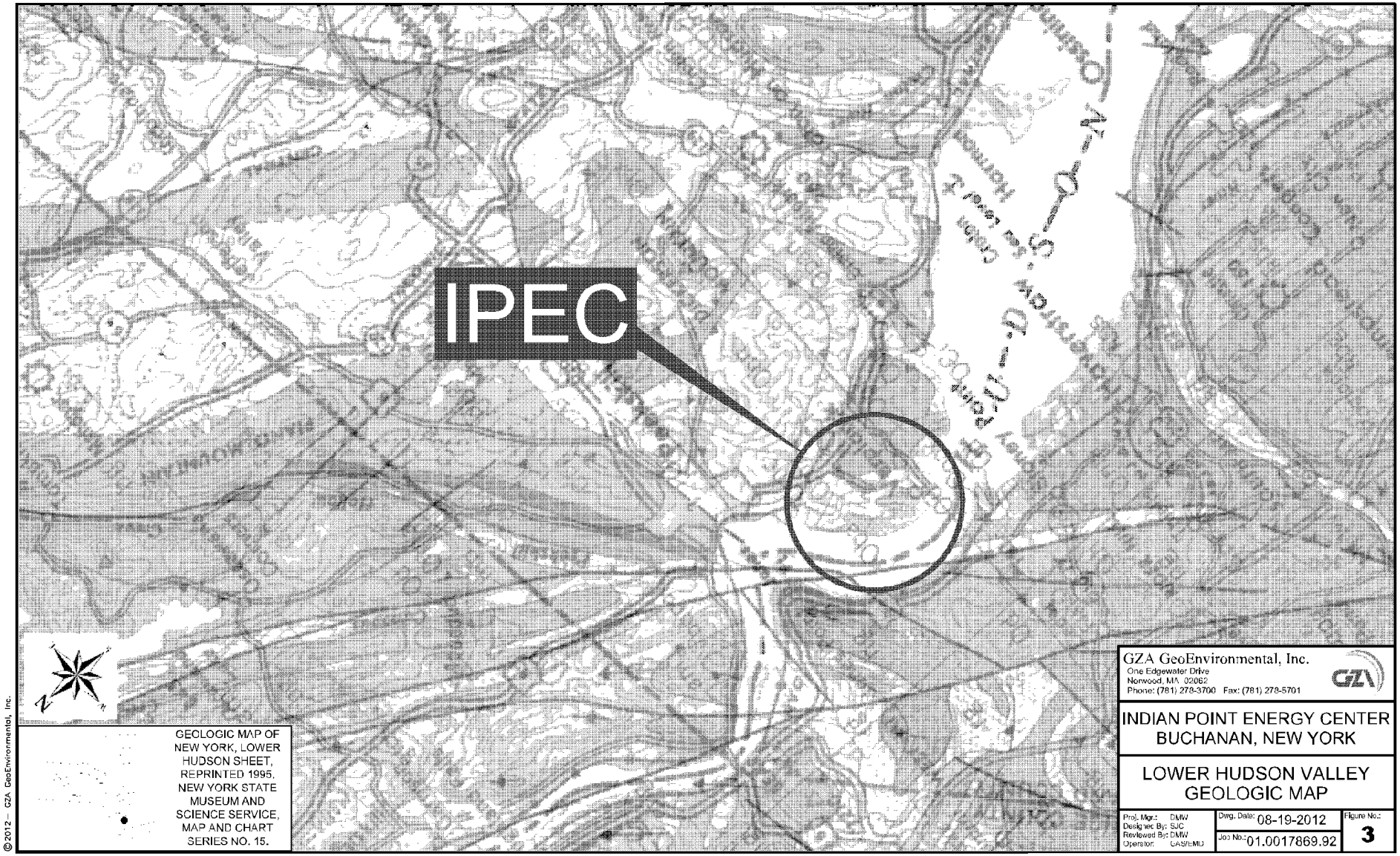

GEOLOGIC MAP OF NEW YORK, LOWER HUDSON SHEET, REPRINTED 1995, NEW YORK STATE MUSEUM AND SCIENCE SERVICE, MAP AND CHART SERIES NO. 15.

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INDIAN POINT ENERGY CENTER
BUCHANAN, NEW YORK

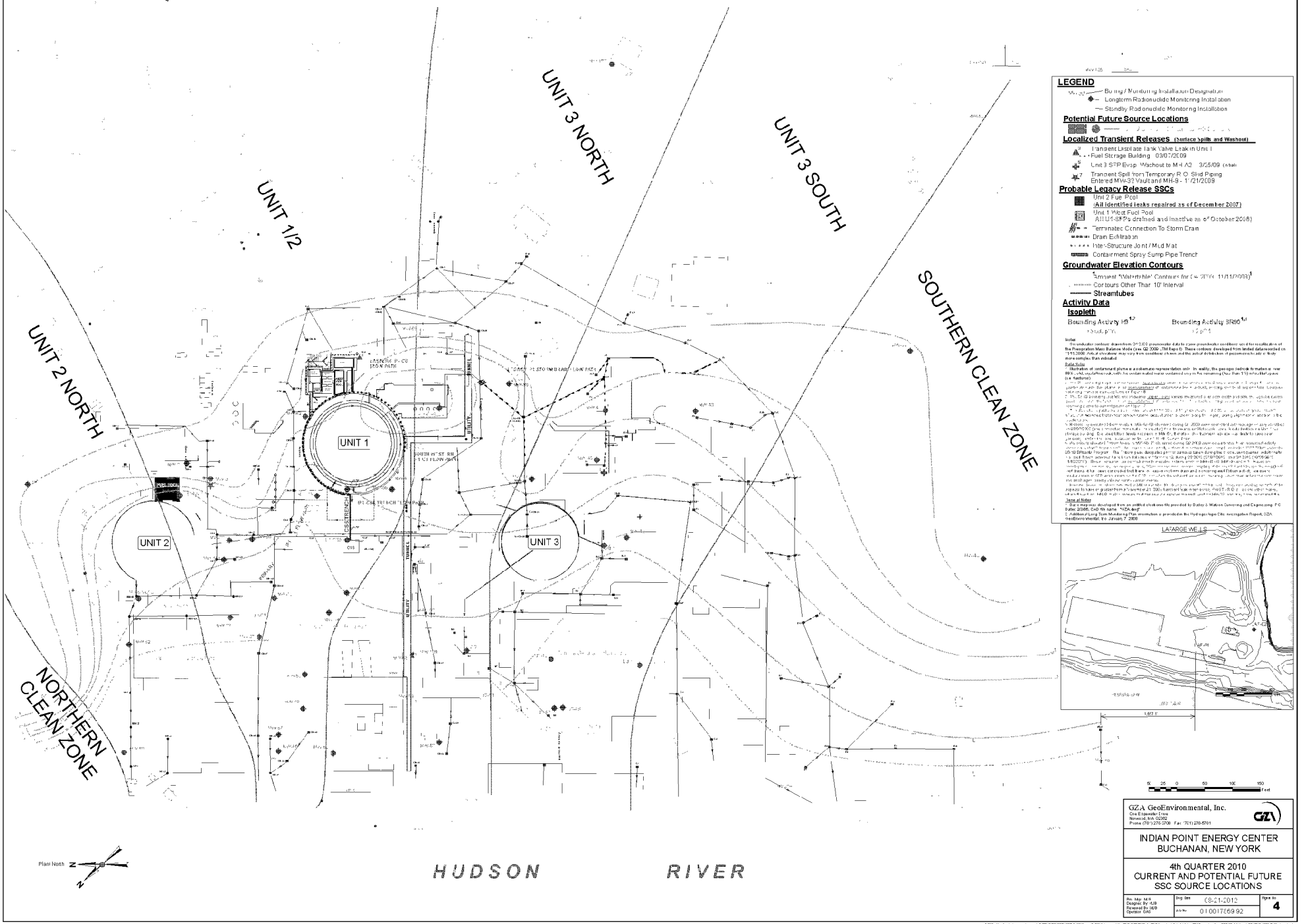
LOWER HUDSON VALLEY
GEOLOGIC MAP

Proj. Mgr.: DMW Designed By: SJC Reviewed By: DMW Operator: CAS/EMD	Dwg. Date: 08-19-2012 Job No.: 01.0017869.92	Figure No.: 3

G:\17,000-18,999\17869\17869-91.MG\Figures\CADD\4Q2010\12-08-20 FD3 Lower Hudson Valley Geologic Map 17869-92_FINAL.dwg [FIG-3] August 20, 2012 - 4:17pm elaine.donohue

IPEC00266304

4th QUARTER 2010 CURRENT AND POTENTIAL FUTURE SSC SOURCE LOCATIONS



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BUCHANAN, NEW YORK

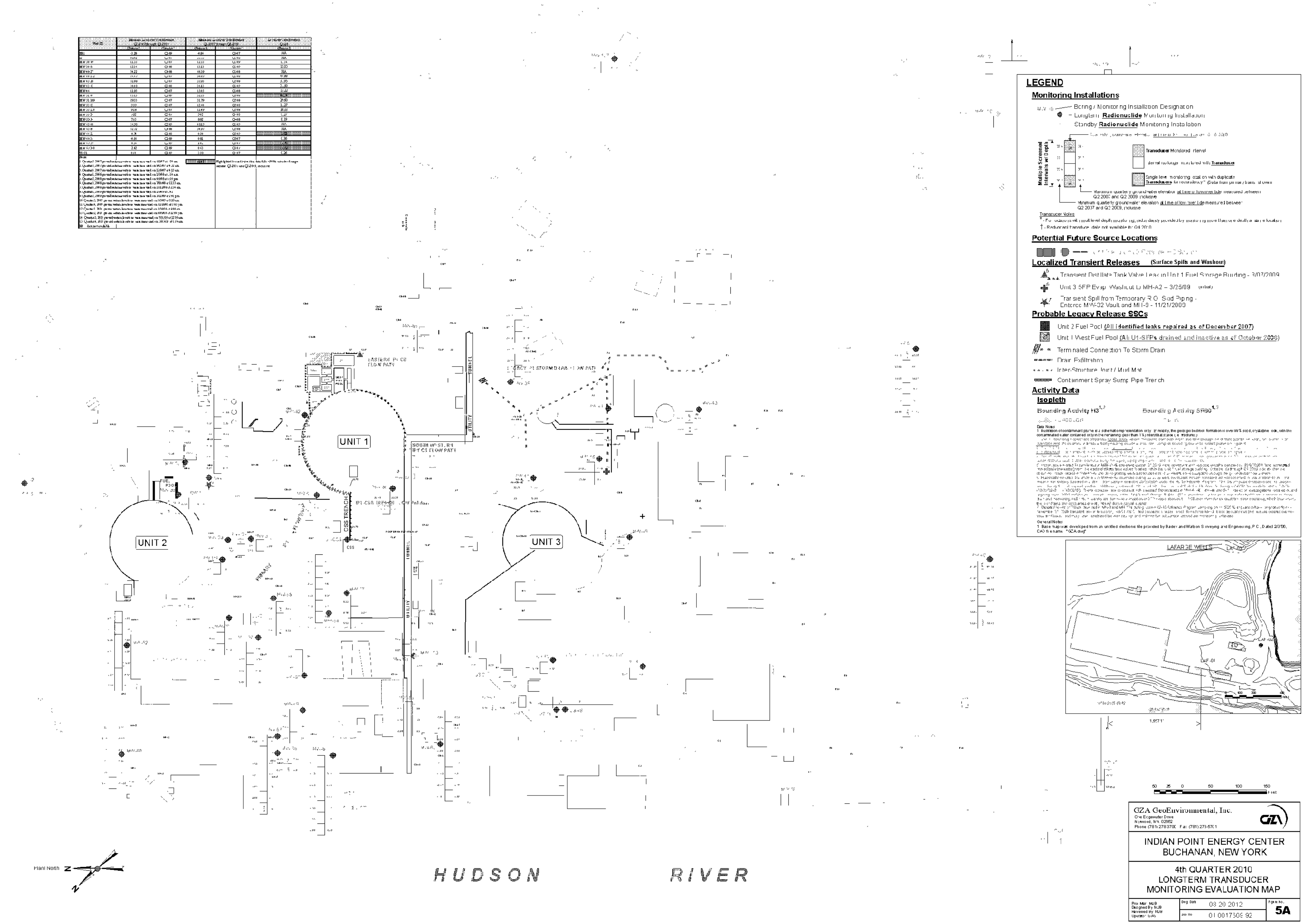
4th QUARTER 2010
CURRENT AND POTENTIAL FUTURE
SSC SOURCE LOCATIONS

Proj. Mgr. MJB Designed By MJB Prepared By MJB Checked GAG	Orig. Date 08-21-2012	Figure No. 4
	Rev. No. 0	100176992

4th QUARTER 2010 LONGTERM TRANSDUCER MONITORING EVALUATION MAP

Well ID	Minimum Low-Tide Elevation Q2-2007 through Q2-2009 (Feet)	(Quarter)	Maximum Low-Tide Elevation Q2-2007 through Q2-2009 (Feet)	(Quarter)	Low-Tide Elevation Q4-10 (Feet)
BH1	-3.28	Q1-09	-0.86	Q3-07	NA
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	NA
MW-30-69	11.35	Q3-07	12.35	Q1-09	[illegible]
MW-30-84	12.34	Q1-08	13.13	Q1-09	[illegible]
MW-40-27	54.22	Q4-08	60.39	Q1-08	NA
[illegible]	[illegible]	Q3-07	[illegible]	Q1-08	[illegible]
[illegible]	51.06	Q3-07	55.90	Q2-08	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MW-46	11.95	Q3-07	15.05	Q1-08	15.22
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	29.33	Q3-07	31.79	Q2-08	29.60
[illegible]	[illegible]	Q3-07	12.60	Q2-08	[illegible]
[illegible]	9.18	Q3-07	11.49	Q2-08	10.55
[illegible]	7.82	Q3-07	9.02	[illegible]	[illegible]
[illegible]	7.65	Q3-07	8.82	[illegible]	8.19
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	NA
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	NA
[illegible]	0.71	[illegible]	0.50	[illegible]	[illegible]
[illegible]	-0.86	Q1-09	0.81	Q3-07	0.36
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	2.42	Q1-09	0.63	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.26

Notes:
Highlighted box indicates the data falls outside of range between Q2-2007 and Q2-2009, inclusive
NA - data not available



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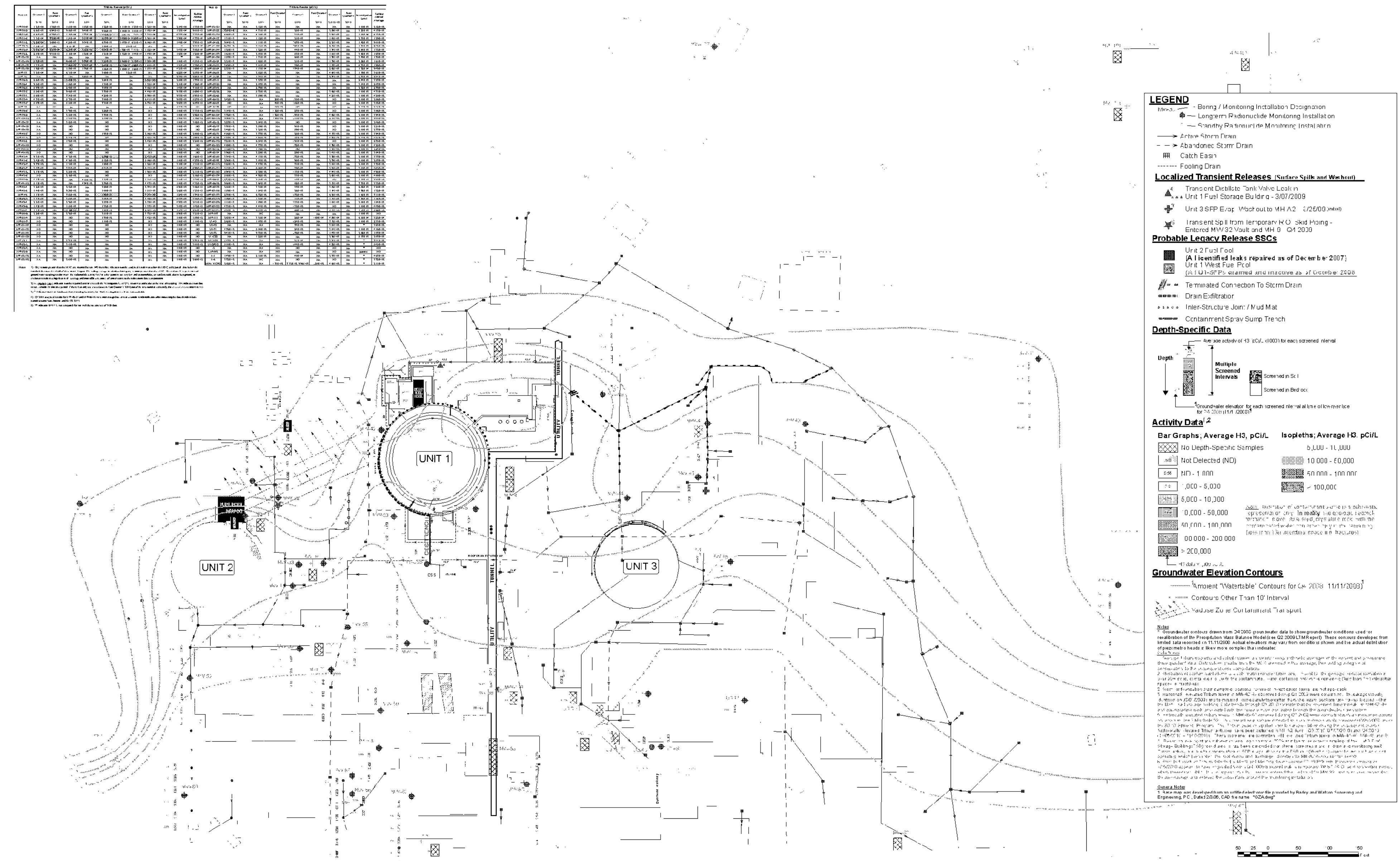
4th QUARTER 2010
LONGTERM TRANSDUCER
MONITORING EVALUATION MAP

Date: 03-20-2012
Job No.: 01.0017309.92
Figure No.: 5A

4th QUARTER 2010 ROLLING AVERAGE[1] TRITIUM ACTIVITY MAP



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BUCHANAN, NEW YORK

4th QUARTER 2010 ROLLING AVERAGE[1] TRITIUM ACTIVITY MAP

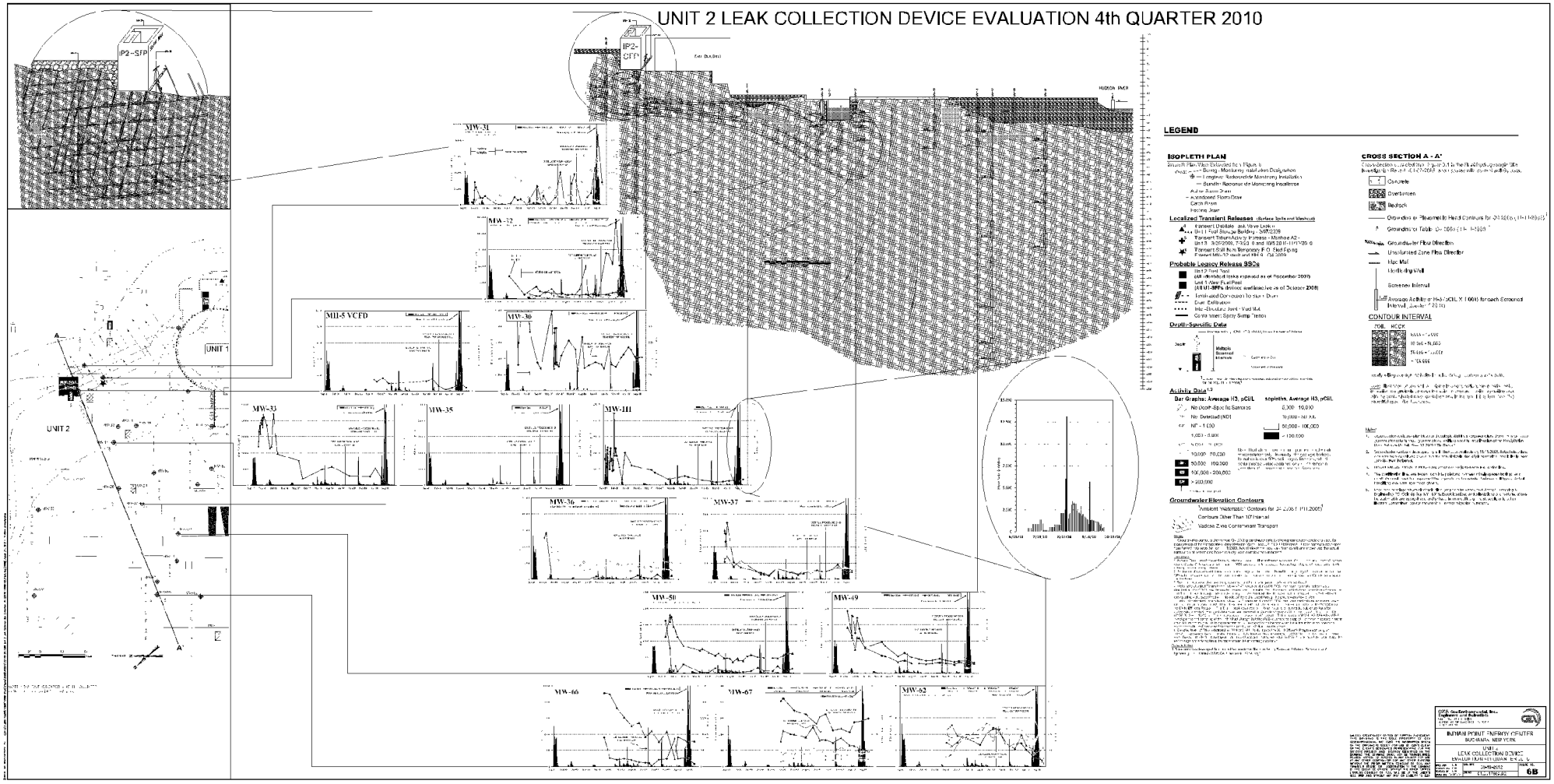
Proj Mgr: MJB Designed By: MJB Reviewed By: MJB Operator: LAG	Date: 08.21.2012	Job No: 01.0017609.92	Figure No. 6

IPEC00266306

IPEC00266307

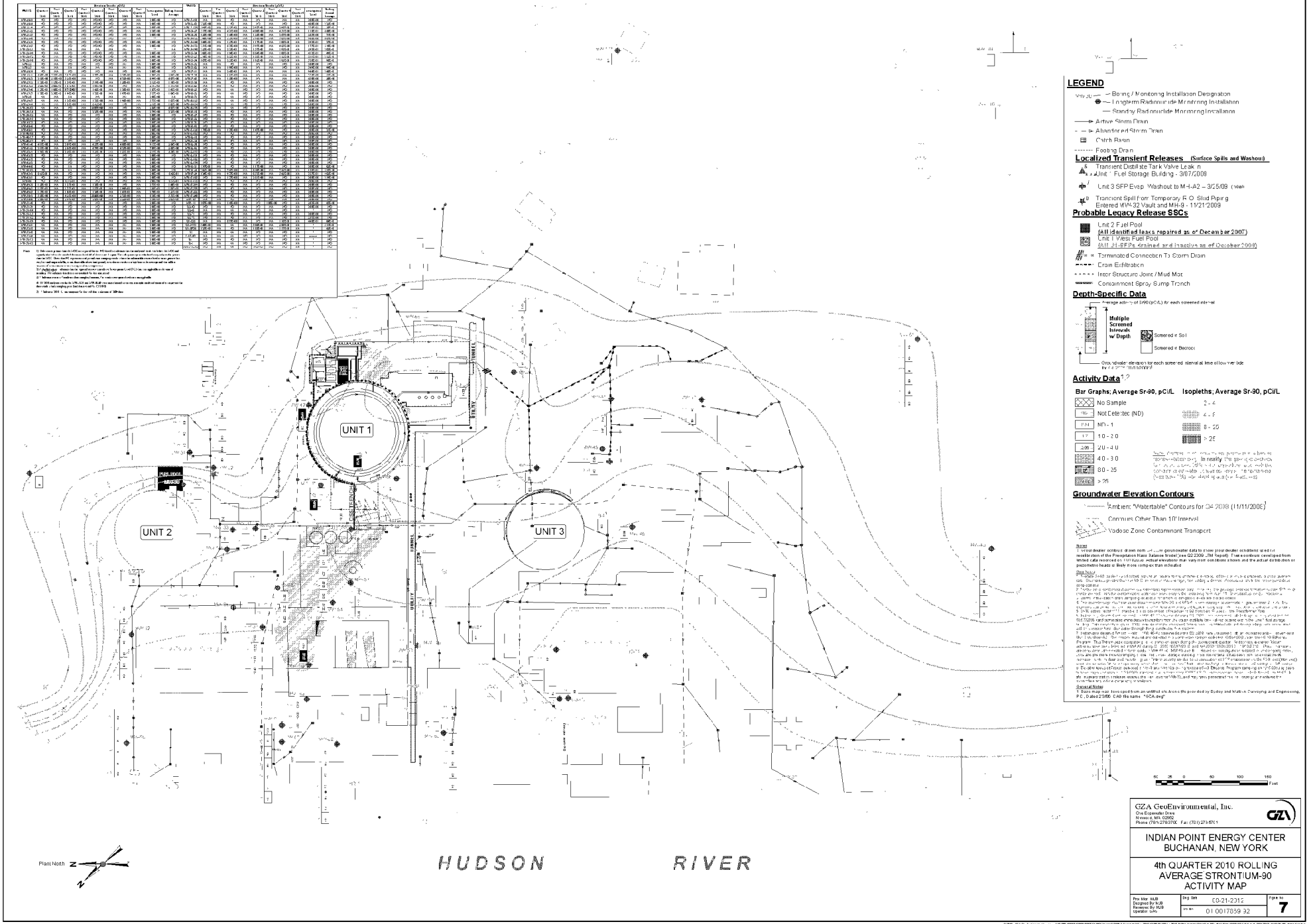
IPEC00266308

UNIT 2 LEAK COLLECTION DEVICE EVALUATION 4th QUARTER 2010



IPEC00266309

4th QUARTER 2010 ROLLING AVERAGE STRONTIUM-90 ACTIVITY MAP



LEGEND

- Boring / Monitoring Installation Designation
- Longterm Radionuclide Monitoring Installation
- Standby Radionuclide Monitoring Installation
- Active Storm Drain
- Abandoned Storm Drain
- Catch Basin
- Footing Drain

Localized Transient Releases (Surface Spills and Washout)

- Transient Distillate Tank Valve Leak in Unit 1 Fuel Storage Building - 3/07/2009
- Unit 3 SFP Evap. Washout to MH-A2 – 3/25/09 (Wash
- Transient Spill from Temporary R.O. Skid Piping Entered MW-32 Vault and MH-8 - 11/21/2009

Probable Legacy Release SSCs

- Unit 2 Fuel Pool (All identified leaks repaired as of December 2007)
- Unit 1 West Fuel Pool (All U1 SFPs drained and inactive as of October 2009)
- Terminated Connection To Storm Drain
- Drain Exfiltration
- Inter Structure Joint / Mud Mat
- Containment Spray Sump Trench

Depth-Specific Data

Average activity of Sr90 (pCi/L) for each screened interval

Multiple Screened Intervals w/ Depth

Screened in Soil

Screened in Bedrock

Groundwater elevation for each screened interval at time of low water tide

Activity Data[1,2]

Bar Graphs; Average Sr-90, pCi/L	Isopleths; Average Sr-90, pCi/L
No Sample	2 - 4
Not Detected (ND)	4 - 8
ND - 1	8 - 20
1.0 - 2.0	> 20
2.0 - 4.0	
4.0 - 8.0	
8.0 - 20	
> 20	

Groundwater Elevation Contours

- Ambient "Watertable" Contours for Q4 2010 (11/11/2010)[1]
- Contours Other Than 10' Interval
- Vadose Zone Contaminant Transport

Notes

1. Water elevation contours drawn from manual groundwater data to show groundwater conditions under the recalibration of the Precipitation Mass Balance model (see 022309 .TM Report). These contours developed from limited data recorded on 11/11/10 (or actual elevations that vary from conditions shown and the actual distribution of groundwater heads is likely more complex than indicated.

Data Notes:

2. Sample ID 2400 is a historical location of observation well MW-24 which was destroyed during construction activities. Data from this location is shown for historical purposes only.

3. Sample ID 2400 is a historical location of observation well MW-24 which was destroyed during construction activities. Data from this location is shown for historical purposes only.

4. The groundwater flow system at IPEC is complex and consists of fractured bedrock, glacial till, and fill materials. Groundwater flow in the fractured bedrock is generally controlled by the orientation, interconnection, and degree of opening of the fractures. Groundwater flow in the overburden is generally controlled by the permeability of the soil and the hydraulic gradient. Groundwater flow in the fractured bedrock is generally from the northwest to the southeast, towards the Hudson River. Groundwater flow in the overburden is generally towards the Hudson River, but is locally influenced by the bedrock topography, the Unit 1 and Unit 2 containment structures, and the Unit 1 and Unit 2 cooling water intake structures. Groundwater flow in the overburden is also influenced by the Unit 1 and Unit 2 discharge canals, the Unit 3 discharge canal, and the Unit 1 and Unit 2 fuel pools. Groundwater flow in the overburden is also influenced by the Unit 1 and Unit 2 fuel pools. Groundwater flow in the overburden is also influenced by the Unit 1 and Unit 2 fuel pools.

5. Groundwater flow in the overburden is also influenced by the Unit 1 and Unit 2 fuel pools. Groundwater flow in the overburden is also influenced by the Unit 1 and Unit 2 fuel pools. Groundwater flow in the overburden is also influenced by the Unit 1 and Unit 2 fuel pools.

6. Groundwater flow in the overburden is also influenced by the Unit 1 and Unit 2 fuel pools. Groundwater flow in the overburden is also influenced by the Unit 1 and Unit 2 fuel pools. Groundwater flow in the overburden is also influenced by the Unit 1 and Unit 2 fuel pools.

7. Groundwater flow in the overburden is also influenced by the Unit 1 and Unit 2 fuel pools. Groundwater flow in the overburden is also influenced by the Unit 1 and Unit 2 fuel pools. Groundwater flow in the overburden is also influenced by the Unit 1 and Unit 2 fuel pools.

General Notes

1. Base map was developed from an undated site drawing provided by Dudley and Mattison Surveying and Engineering, P.C., Dated 2/9/06. CAD file name: "IPCA.dwg"

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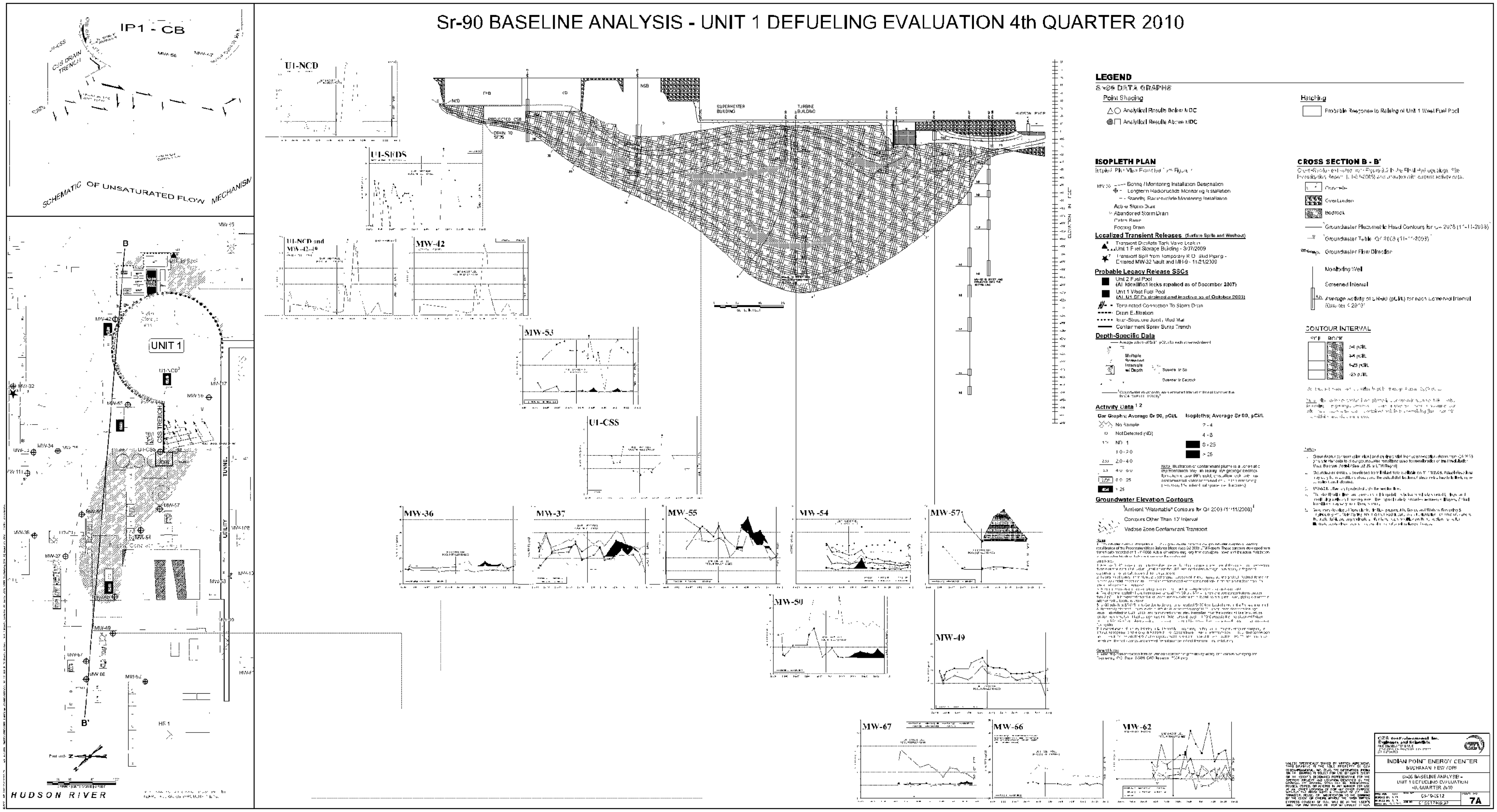
INDIAN POINT ENERGY CENTER
BUCHANAN, NEW YORK

4th QUARTER 2010 ROLLING AVERAGE STRONTIUM-90 ACTIVITY MAP

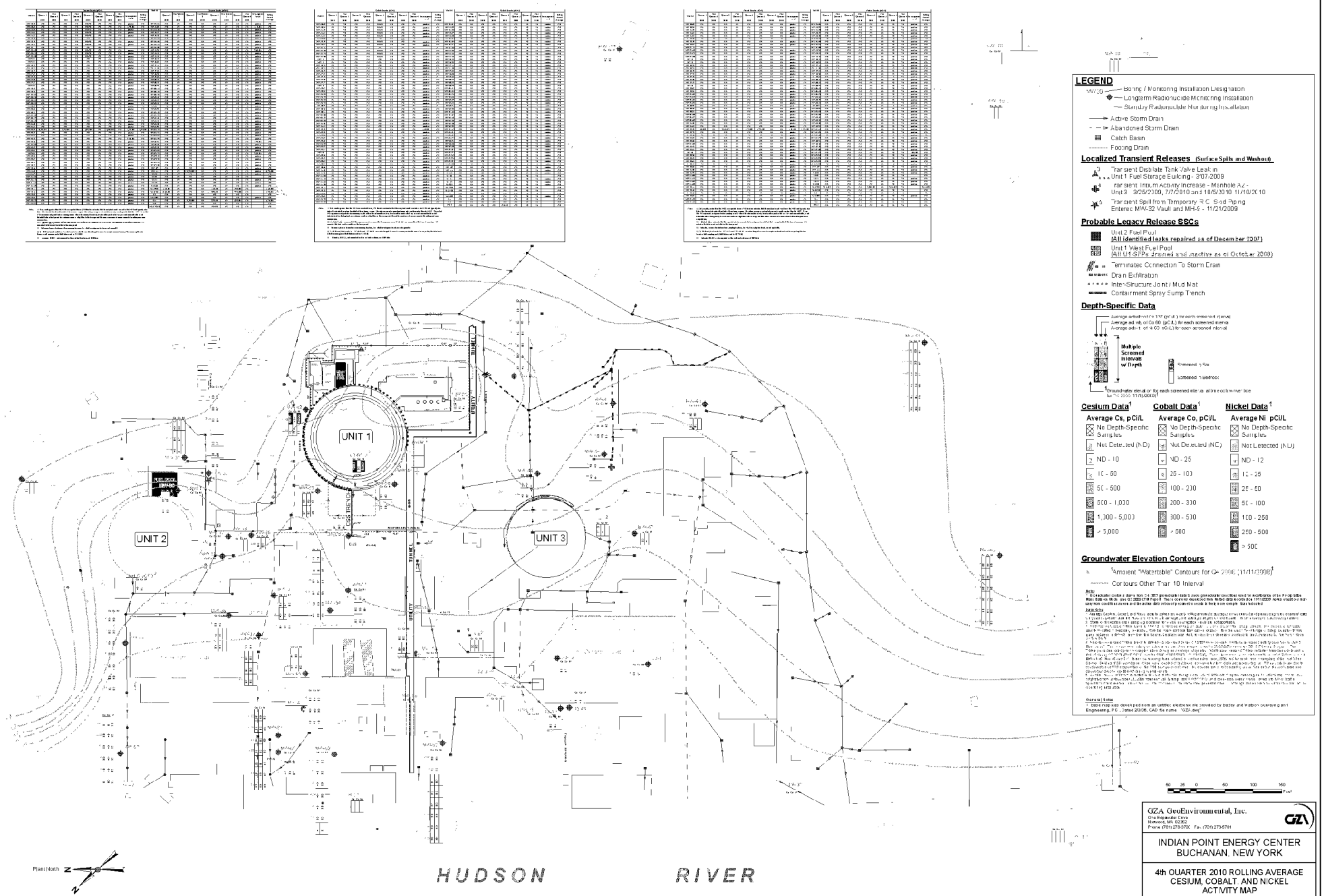
Proj. Mgr. MJB	Dwg. Date	02-21-2012	Figure No.
Designed By MJB			7
Reviewed By MJB	Project No.	01.0017859.32	
Operator MAS			

IPEC00266310



IPEC00266311

4th QUARTER 2010 ROLLING AVERAGE[1] CESIUM, COBALT, AND NICKEL ACTIVITY MAP



LEGEND

- MW30 — Boring / Monitoring Installation Designation
- Longterm Radionuclide Monitoring Installation
- Standby Radionuclide Monitoring Installation
- Active Storm Drain
- Abandoned Storm Drain
- Catch Basin
- Footing Drain

Localized Transient Releases (Surface Spills and Washout)

- Transient Distillate Tank Valve Leak in Unit 1 Fuel Storage Building - 3/07/2009
- Transient Tritium Activity Increase - Manhole A2 - Unit 3 - 3/26/2009, 7/7/2010 and 10/6/2010 11/10/2010
- Transient Spill from Temporary RCS Sod Piping Enclosure MW-32 Vault and MH-5 - 11/21/2009

Probable Legacy Release SSCs

- Unit 2 Fuel Pool (All Identified leaks repaired as of December 2007)
- Unit 1 West Fuel Pool (All U1 SFPs drained and inactive as of October 2009)
- Terminated Connection To Storm Drain
- Drain Exfiltration
- Inter-Structure Joint / Mud Mat
- Containment Spray Sump Trench

Depth-Specific Data

Average activity of Cs 137 (pCi/L) for each screened interval
Average activity of Co 60 (pCi/L) for each screened interval
Average activity of H 3 (pCi/L) for each screened interval

Multiple Screened Intervals w Depth

Screened in Fill
Screened in Bedrock

Groundwater elevation for each screened interval on the referenced date (e.g. 11/11/2008)

Cesium Data[1]

Average Cs, pCi/L
- No Depth-Specific Samples
- Not Detected (ND)
- ND - 10
- 10 - 50
- 50 - 500
- 500 - 1,000
- 1,300 - 5,000
- > 5,000

Cobalt Data[1]

Average Co, pCi/L
- No Depth-Specific Samples
- Not Detected (ND)
- ND - 25
- 25 - 100
- 100 - 200
- 200 - 300
- 300 - 500
- > 500

Nickel Data[1]

Average Ni pCi/L
- No Depth-Specific Samples
- Not Detected (ND)
- ND - 12
- 12 - 25
- 25 - 50
- 50 - 100
- 100 - 250
- 250 - 500
- > 500

Groundwater Elevation Contours

- Ambient "Watertable" Contours for Q4 2008 (11/11/2008)[1]
- Contours Other Than 10 Interval

Note:
1. Groundwater contours drawn from Q4 2010 groundwater data from groundwater monitoring wells for evaluation of the Protected Area Radioactive Materials Site per GZ 2009 LTM Report. The contours depicted are based on data collected on 11/11/2008. Areas shaded in green are from monitoring wells screened within the shallow overburden soils. Areas shaded in blue are from monitoring wells screened within the bedrock. Data collected from wells screened in both overburden soils and bedrock are depicted in green.

Data Notes:
- Tritium, Cesium, Cobalt and Nickel data is plotted as the average of the most recent four quarters of data collected from each monitoring well. Where a monitoring well was not sampled for four consecutive quarters, the average was calculated using the most recent data available.
- Where a monitoring well was dry or contained insufficient water to collect a groundwater sample during a quarterly sampling event, the data for that quarter was not used in the calculation of the average.
- Where a monitoring well was sampled more than once during a quarterly sampling event, the data from the most recent sample was used in the calculation of the average.
- Where a monitoring well was sampled more than once during a quarterly sampling event, and the most recent sample was not analyzed for a particular radionuclide, the data from the most recent sample analyzed for that radionuclide was used in the calculation of the average.
- Where a monitoring well was sampled more than once during a quarterly sampling event, and the most recent sample was not analyzed for a particular radionuclide, the data from the most recent sample analyzed for that radionuclide was used in the calculation of the average.
- Where a monitoring well was sampled more than once during a quarterly sampling event, and the most recent sample was not analyzed for a particular radionuclide, the data from the most recent sample analyzed for that radionuclide was used in the calculation of the average.

General Notes:
1. Base map was developed from an unofficial electronic file provided by Bradley and Watson Surveying and Engineering, P.C., dated 2/2006, CAD file name "GZA.dwg"

50 25 0 50 100 150 Feet

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INDIAN POINT ENERGY CENTER
BUCHANAN, NEW YORK

4th QUARTER 2010 ROLLING AVERAGE CESIUM, COBALT, AND NICKEL ACTIVITY MAP

Proj. Mgr: MJE
Designed By: NJB
Reviewed By: NJB
Operator: DJN

Orig. Date: 00-01-2012
Job No: 01.0017609.92

Figure No: 8

APPENDIX A: LIMITATIONS

HYDROGEOLOGICAL LIMITATIONS

1. The conclusions and recommendations submitted in this report are based in part upon the radiological, chemical and physical data from water analyses. These data were obtained from specific sampling locations at specific times. The full nature and extent of variations in the data between these specific locations and times are not known. The conditions existing between these specific locations and times have only been inferred using interpolation and extrapolation based on judgment.

2. The subsurface profiles described in the text and presented in the report figures are intended to convey anticipated trends in subsurface conditions. The conditions shown are approximate and generalized and were developed, in part, based on judgment. For specific information at specific locations, refer to the individual subsurface investigation logs.

3. Water level readings (piezometric pressures) have been made in the specific borings, monitoring wells, and Waterloo installations at times and under conditions stated. These data have been reviewed and interpretations have been made in the text and on the figures of this report. However, it must be noted that temporal and spatial fluctuations in the level of the groundwater may occur due to variations in rainfall and other factors different from those prevailing at the time and location measurements were made.

4. Where quantitative laboratory testing has been conducted by an outside laboratory, GZA has relied upon the validity of the data provided, and has not conducted an independent laboratory evaluation of the reliability of these data.

5. Radiological and chemical analyses have been performed for specific parameters during the course of this study, as summarized in the text. Additional constituents not searched for may be present in soil and groundwater at the site.

6. Variations in the types and concentrations of contaminants and variations in their flow paths may occur due to seasonal water table fluctuations, past and current plant operational practices, the passage of time, and other factors. Should additional data (water analyses, water elevations, subsurface deposits, plant construction and operation, etc.) become available in the future, these data should be reviewed by GZA, and the conclusions and recommendations presented herein modified accordingly.

7. This monitoring report was developed by GZA GeoEnvironmental Inc for the exclusive of Entergy Nuclear Northeast (Entergy) at the Indian Point Energy Center. Any use of data or information provided in the report, by parties other than Entergy, is prohibitated without the prior written permission of Entergy and GZA.

APPENDIX B: TRANSDUCER INSTALLATION LOGS

TRANSDUCER INSTALLATION LOG

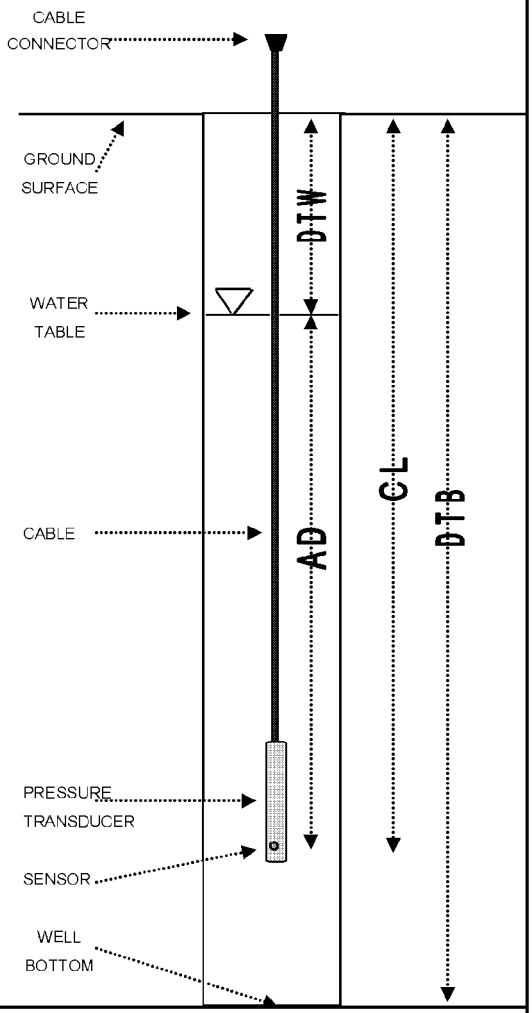
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	HR-1#2
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	--	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	14.99	DATE	12/8/10
PSI CAPACITY	30	CASING ELEVATION (FT)	18.50		
SERIAL NUMBER	9401	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			1.40
GZA ENGINEER	M. Britos				

ELEVATION OF MEASURING POINT - DEPTH TO WATER = REFERENCE ELEVATION (WATER TABLE ELEVATION)

DEPTH TO WATER + ACTUAL DEPTH = CABLE LENGTH (if transducer is functioning properly)

DEPTH TO BOTTOM:		--	FT
GROUND ELEVATION:		14.99	FT M.S.L.
CASING ELEVATION:		18.50	FT M.S.L.
CASING ABOVE (+) OR BELOW (-) GROUND:		above	
DISTANCE FROM CASING TO GROUND (+ OR -):		3.50	FT
MEASURED CABLE LENGTH		--	FT
TIME OF MEASUREMENT:		1154	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		17.10	FT
ACTUAL DEPTH:	+		FT
THEORETICAL CABLE LENGTH:	=	17.100	FT
HAVE CLOCKS BEEN SYNCHRONIZED?		☑	check
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?		☑	check
ELEVATION OF MEASURING POINT:		18.50	FT M.S.L.
DEPTH TO WATER:	-	17.10	FT
REFERENCE ELEVATION:	=	1.40	FT M.S.L.
TEST NAME:		HR-1#2	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		1154	HRS



LEGEND:
DTW - DEPTH TO WATER
DTB - DEPTH TO BOTTOM OF WELL
AD - ACTUAL DEPTH OF TRANSDUCER UNDER WATER
CL - CABLE LENGTH FROM SENSOR TO GROUND SURFACE/ TOP OF CASING

NOTES:

Difference -0.071. Ok. No test to download. Reset and start new test. Error in communication. Could not start test.

TRANSDUCER INSTALLATION LOG

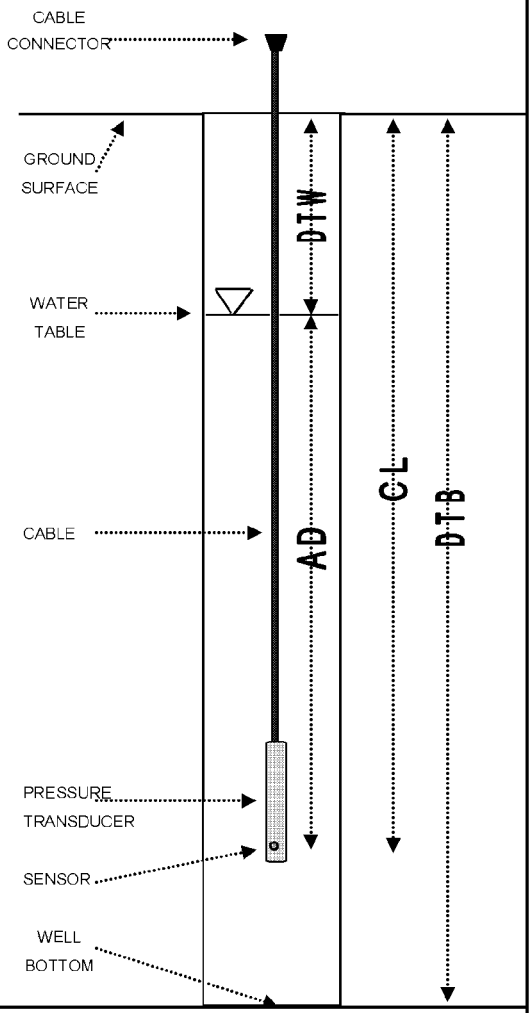
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	HR-1#2
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	--	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	14.99	DATE	12/3/10
PSI CAPACITY	30	CASING ELEVATION (FT)	18.50		
SERIAL NUMBER	9401	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			1.71
GZA ENGINEER	M. Britos				

ELEVATION OF MEASURING POINT - DEPTH TO WATER = REFERENCE ELEVATION (WATER TABLE ELEVATION)

DEPTH TO WATER + ACTUAL DEPTH = CABLE LENGTH (if transducer is functioning properly)

DEPTH TO BOTTOM:		--	FT
GROUND ELEVATION:		14.99	FT M.S.L.
CASING ELEVATION:		18.50	FT M.S.L.
CASING ABOVE (+) OR BELOW (-) GROUND:		above	
DISTANCE FROM CASING TO GROUND (+ OR -):		3.50	FT
MEASURED CABLE LENGTH		--	FT
TIME OF MEASUREMENT:		1154	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		16.79	FT
ACTUAL DEPTH:	+	5.342	FT
THEORETICAL CABLE LENGTH:	=	22.132	FT
HAVE CLOCKS BEEN SYNCHRONIZED?		☑	check
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?		☑	check
ELEVATION OF MEASURING POINT:		18.50	FT M.S.L.
DEPTH TO WATER:	-	16.79	FT
REFERENCE ELEVATION:	=	1.71	FT M.S.L.
TEST NAME:		HR-1#2	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		1154	HRS



LEGEND:
DTW - DEPTH TO WATER
DTB - DEPTH TO BOTTOM OF WELL
AD - ACTUAL DEPTH OF TRANSDUCER UNDER WATER
CL - CABLE LENGTH FROM SENSOR TO GROUND SURFACE/ TOP OF CASING

NOTES:

No connection. Troubleshoot and reconnect.

TRANSDUCER INSTALLATION LOG

GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	I-2n
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

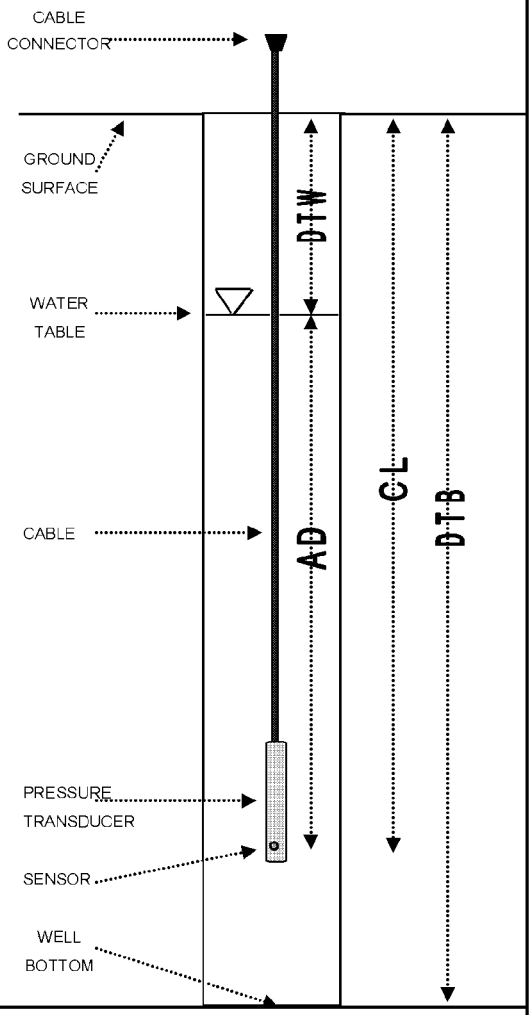
MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	41.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	80.92	DATE	11/17/10
PSI CAPACITY	30	CASING ELEVATION (FT)	82.23		
SERIAL NUMBER	16587	CASING DIAMETER (INCH)	2		

	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)	50.75
GZA ENGINEER	M Britos		

ELEVATION OF MEASURING POINT - DEPTH TO WATER = REFERENCE ELEVATION (WATER TABLE ELEVATION)

DEPTH TO WATER + ACTUAL DEPTH = CABLE LENGTH (if transducer is functioning properly)

DEPTH TO BOTTOM:		41.00	FT
GROUND ELEVATION:		80.92	FT M.S.L.
CASING ELEVATION:		82.23	FT M.S.L.
CASING ABOVE (+) OR BELOW (-) GROUND:		above	
DISTANCE FROM CASING TO GROUND (+ OR -):		1.31	FT
MEASURED CABLE LENGTH:		--	FT
TIME OF MEASUREMENT:		1138	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		31.48	FT
ACTUAL DEPTH:	+	40.729	FT
THEORETICAL CABLE LENGTH:	=	72.209	FT
HAVE CLOCKS BEEN SYNCHRONIZED?		☑	check
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?		☑	check
ELEVATION OF MEASURING POINT:		82.23	FT M.S.L.
DEPTH TO WATER:	-	31.48	FT
REFERENCE ELEVATION:	=	50.75	FT M.S.L.
TEST NAME:		I-2	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		1138	HRS



LEGEND:
DTW - DEPTH TO WATER
DTB - DEPTH TO BOTTOM OF WELL
AD - ACTUAL DEPTH OF TRANSDUCER UNDER WATER
CL - CABLE LENGTH FROM SENSOR TO GROUND SURFACE/ TOP OF CASING

NOTES:

Difference -0.721. Reset.

TRANSDUCER INSTALLATION LOG

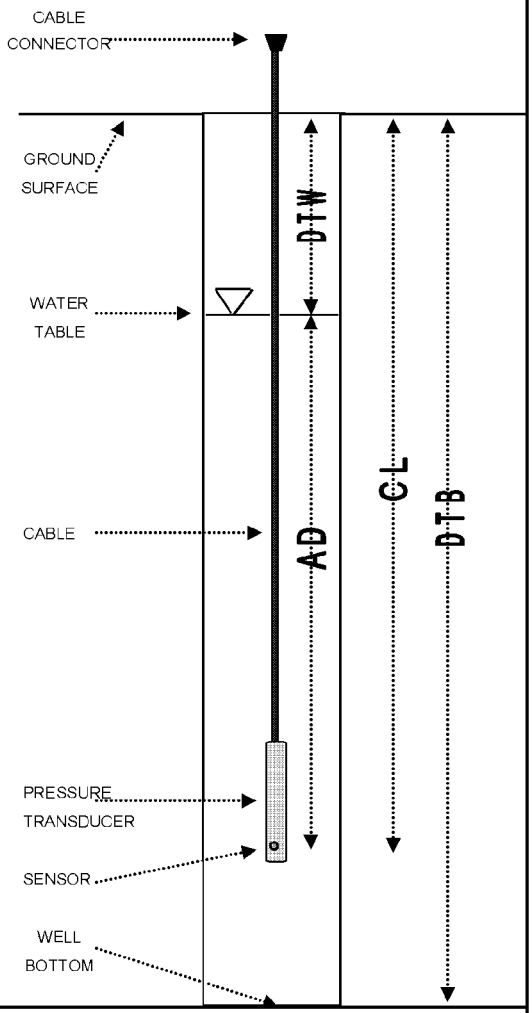
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	I-2n
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	41.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	80.92	DATE	12/3/10
PSI CAPACITY	30	CASING ELEVATION (FT)	82.23		
SERIAL NUMBER	16587	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			52.24
GZA ENGINEER	M Britos				

ELEVATION OF MEASURING POINT - DEPTH TO WATER = REFERENCE ELEVATION (WATER TABLE ELEVATION)

DEPTH TO WATER + ACTUAL DEPTH = CABLE LENGTH (if transducer is functioning properly)

DEPTH TO BOTTOM:	41.00	FT	
GROUND ELEVATION:	80.92	FT M.S.L.	
CASING ELEVATION:	82.23	FT M.S.L.	
CASING ABOVE (+) OR BELOW (-) GROUND:	above		
DISTANCE FROM CASING TO GROUND (+ OR -):	1.31	FT	
MEASURED CABLE LENGTH:	--	FT	
TIME OF MEASUREMENT:	1138	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	29.99	FT	
ACTUAL DEPTH:	+ 42.713	FT	
THEORETICAL CABLE LENGTH:	= 72.703	FT	
HAVE CLOCKS BEEN SYNCHRONIZED?	☑	check	
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?	☑	check	
ELEVATION OF MEASURING POINT:	82.23	FT M.S.L.	
DEPTH TO WATER:	- 29.99	FT	
REFERENCE ELEVATION:	= 52.24	FT M.S.L.	
TEST NAME:	I-2		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	1138	HRS	



LEGEND:
DTW - DEPTH TO WATER
DTB - DEPTH TO BOTTOM OF WELL
AD - ACTUAL DEPTH OF TRANSDUCER UNDER WATER
CL - CABLE LENGTH FROM SENSOR TO GROUND SURFACE/ TOP OF CASING

NOTES:

Difference -0.499. Reset.

TRANSDUCER INSTALLATION LOG

GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-36-24
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

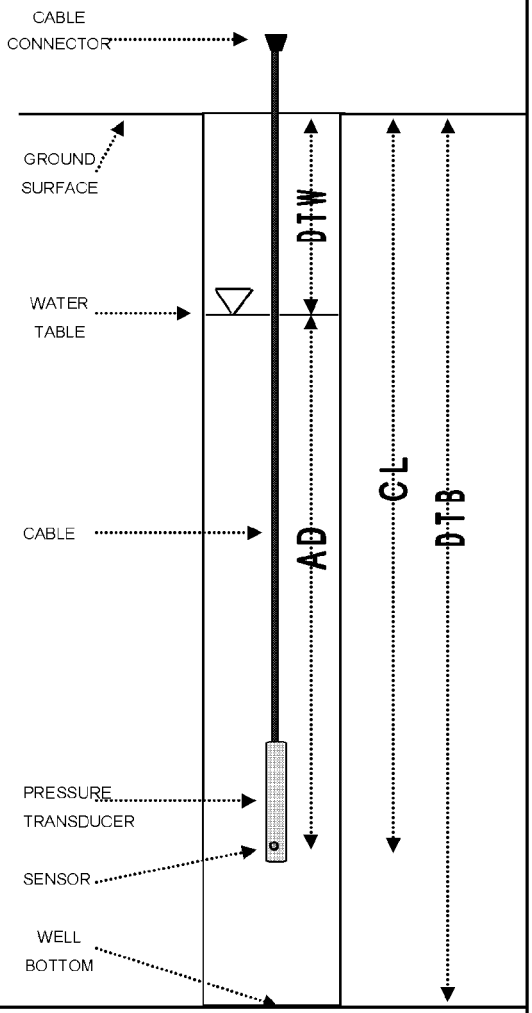
MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	54.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	11.799	DATE	11/4/10
PSI CAPACITY	30	CASING ELEVATION (FT)	11.598		
SERIAL NUMBER	5376	CASING DIAMETER (INCH)	2		

	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)	6.87
GZA ENGINEER	M. Britos		

ELEVATION OF MEASURING POINT - DEPTH TO WATER = REFERENCE ELEVATION (WATER TABLE ELEVATION)

DEPTH TO WATER + ACTUAL DEPTH = CABLE LENGTH (if transducer is functioning properly)

DEPTH TO BOTTOM:		24.00	FT
GROUND ELEVATION:		11.799	FT M.S.L.
CASING ELEVATION:		11.598	FT M.S.L.
CASING ABOVE (+) OR BELOW (-) GROUND:		below	
DISTANCE FROM CASING TO GROUND (+ OR -):		-0.201	FT
		--	FT
TIME OF MEASUREMENT:		1411	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		4.73	FT
ACTUAL DEPTH:	+	59.241	FT
THEORETICAL CABLE LENGTH:	=	63.971	FT
HAVE CLOCKS BEEN SYNCHRONIZED?		☑	check
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?		☑	check
ELEVATION OF MEASURING POINT:		11.598	FT M.S.L.
DEPTH TO WATER:	-	4.73	FT
REFERENCE ELEVATION:	=	6.868	FT M.S.L.
TEST NAME:		MW-36-24	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		1411	HRS



LEGEND:
DTW - DEPTH TO WATER
DTB - DEPTH TO BOTTOM OF WELL
AD - ACTUAL DEPTH OF TRANSDUCER UNDER WATER
CL - CABLE LENGTH FROM SENSOR TO GROUND SURFACE/ TOP OF CASING

NOTES:

Difference found -3.103. Reset.

TRANSDUCER INSTALLATION LOG

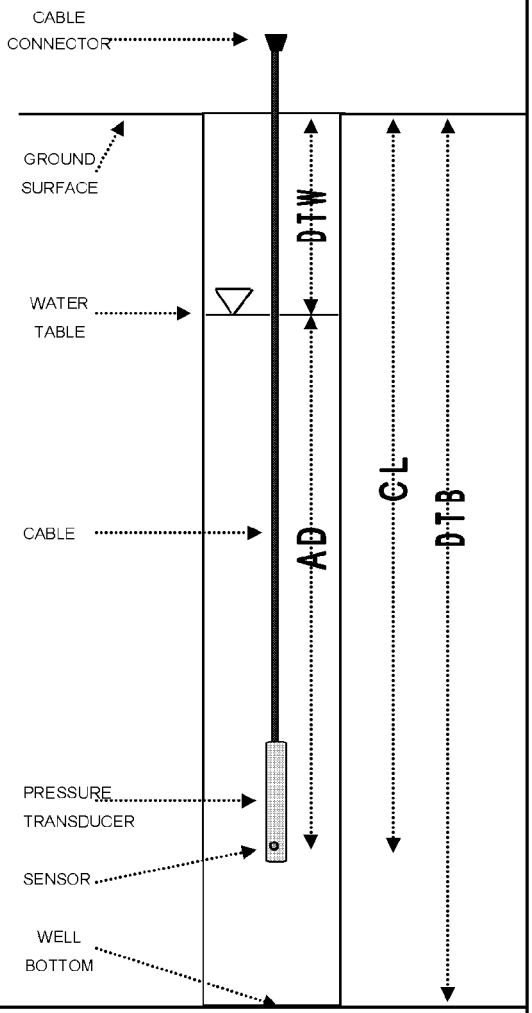
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-37-40
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	57.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	15.021	DATE	11/4/10
PSI CAPACITY	30	CASING ELEVATION (FT)	14.852		
SERIAL NUMBER	2280	CASING DIAMETER (INCH)	1		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT) *			6.21
GZA ENGINEER	M. Britos				

ELEVATION OF MEASURING POINT - DEPTH TO WATER = REFERENCE ELEVATION (WATER TABLE ELEVATION)

DEPTH TO WATER + ACTUAL DEPTH = CABLE LENGTH (if transducer is functioning properly)

DEPTH TO BOTTOM:	40.00	FT	
GROUND ELEVATION:	15.021	FT M.S.L.	
CASING ELEVATION:	14.852	FT M.S.L.	
CASING ABOVE (+) OR BELOW (-) GROUND:	below		
DISTANCE FROM CASING TO GROUND (+ OR -):	-0.169	FT	
MEASURED CABLE LENGTH:	--	FT	
TIME OF MEASUREMENT:	1018	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	8.64	*FT	
ACTUAL DEPTH:	+	FT	
THEORETICAL CABLE LENGTH:	= 8.640	FT	
HAVE CLOCKS BEEN SYNCHRONIZED?	☑	check	
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?	☑	check	
ELEVATION OF MEASURING POINT:	14.852	FT M.S.L.	
DEPTH TO WATER:	- 8.64	*FT	
REFERENCE ELEVATION:	= 6.212	*FT M.S.L.	
TEST NAME:	MW-37-40		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	1018	HRS	



LEGEND:
DTW - DEPTH TO WATER
DTB - DEPTH TO BOTTOM OF WELL
AD - ACTUAL DEPTH OF TRANSDUCER UNDER WATER
CL - CABLE LENGTH FROM SENSOR TO GROUND SURFACE/ TOP OF CASING

NOTES:

TRANSDUCER INSTALLATION LOG

GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-41-40
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

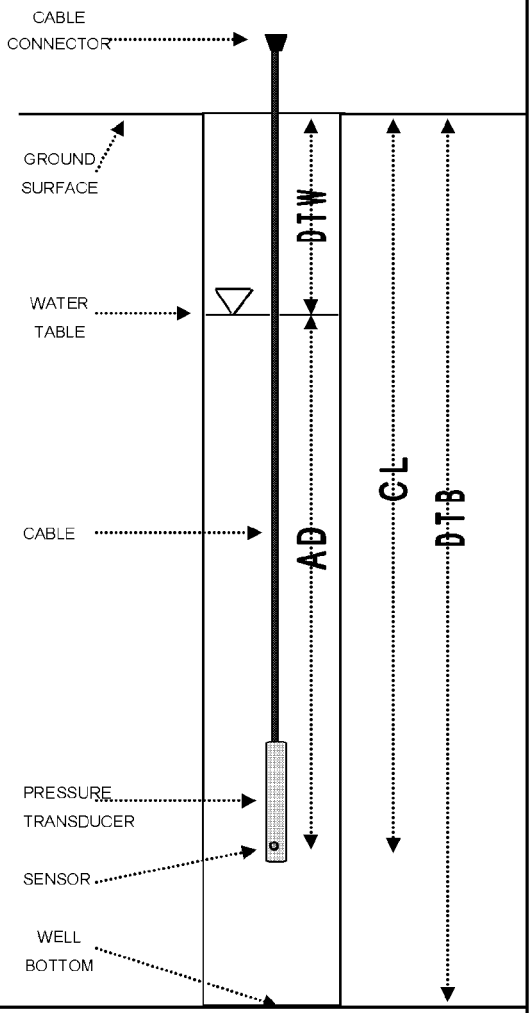
MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	64.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	54.87	DATE	10/25/10
PSI CAPACITY	30	CASING ELEVATION (FT)	54.13		
SERIAL NUMBER		CASING DIAMETER (INCH)	2		

	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)	31.02
GZA ENGINEER	M. Britos		

ELEVATION OF MEASURING POINT - DEPTH TO WATER = REFERENCE ELEVATION (WATER TABLE ELEVATION)

DEPTH TO WATER + ACTUAL DEPTH = CABLE LENGTH (if transducer is functioning properly)

DEPTH TO BOTTOM:		40.00	FT
GROUND ELEVATION:		54.87	FT M.S.L.
CASING ELEVATION:		54.13	FT M.S.L.
CASING ABOVE (+) OR BELOW (-) GROUND:		below	
DISTANCE FROM CASING TO GROUND (+ OR -):		-0.74	FT
MEASURED CABLE LENGTH:		--	FT
TIME OF MEASUREMENT:		1322	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		23.11	FT
ACTUAL DEPTH:	+		FT
THEORETICAL CABLE LENGTH:	=	23.110	FT
HAVE CLOCKS BEEN SYNCHRONIZED?		☑	check
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?		☑	check
ELEVATION OF MEASURING POINT:		54.13	FT M.S.L.
DEPTH TO WATER:	−	23.11	FT
REFERENCE ELEVATION:	=	31.02	FT M.S.L.
TEST NAME:		MW-41-40	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		1322	HRS



LEGEND:
DTW - DEPTH TO WATER
DTB - DEPTH TO BOTTOM OF WELL
AD - ACTUAL DEPTH OF TRANSDUCER UNDER WATER
CL - CABLE LENGTH FROM SENSOR TO GROUND SURFACE/ TOP OF CASING

NOTES:

TRANSDUCER INSTALLATION LOG

GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-43-28
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

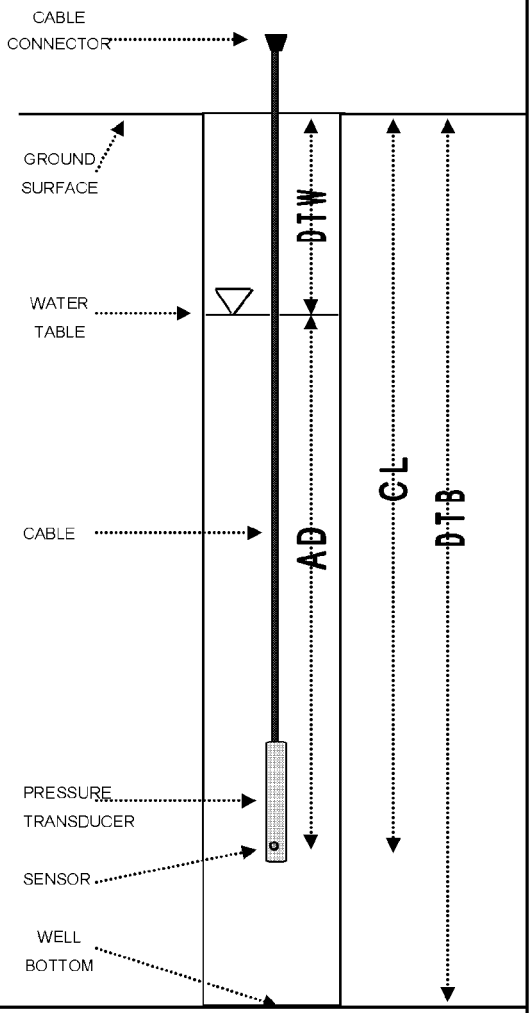
MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	63.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	48.760	DATE	10/25/10
PSI CAPACITY	30	CASING ELEVATION (FT)	48.021		
SERIAL NUMBER	11331	CASING DIAMETER (INCH)	2		

	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)	32.58
GZA ENGINEER	M. Britos		

ELEVATION OF MEASURING POINT - DEPTH TO WATER = REFERENCE ELEVATION (WATER TABLE ELEVATION)

DEPTH TO WATER + ACTUAL DEPTH = CABLE LENGTH (if transducer is functioning properly)

DEPTH TO BOTTOM:	28.00	FT	
GROUND ELEVATION:	48.760	FT M.S.L.	
CASING ELEVATION:	48.021	FT M.S.L.	
CASING ABOVE (+) OR BELOW (-) GROUND:	below		
DISTANCE FROM CASING TO GROUND (+ OR -):	-0.739	FT	
MEASURED CABLE LENGTH:	--	FT	
TIME OF MEASUREMENT:	09:11	HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	15.44	FT	
ACTUAL DEPTH:	+ 25.838	FT	
THEORETICAL CABLE LENGTH:	= 41.278	FT	
HAVE CLOCKS BEEN SYNCHRONIZED?	☑	check	
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?	☑	check	
ELEVATION OF MEASURING POINT:	48.021	FT M.S.L.	
DEPTH TO WATER:	- 15.44	FT	
REFERENCE ELEVATION:	= 32.581	FT M.S.L.	
TEST NAME:	MW-43-28		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:	09:11	HRS	



LEGEND:
DTW - DEPTH TO WATER
DTB - DEPTH TO BOTTOM OF WELL
AD - ACTUAL DEPTH OF TRANSDUCER UNDER WATER
CL - CABLE LENGTH FROM SENSOR TO GROUND SURFACE/ TOP OF CASING

NOTES:

TRANSDUCER INSTALLATION LOG

GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-43-28
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

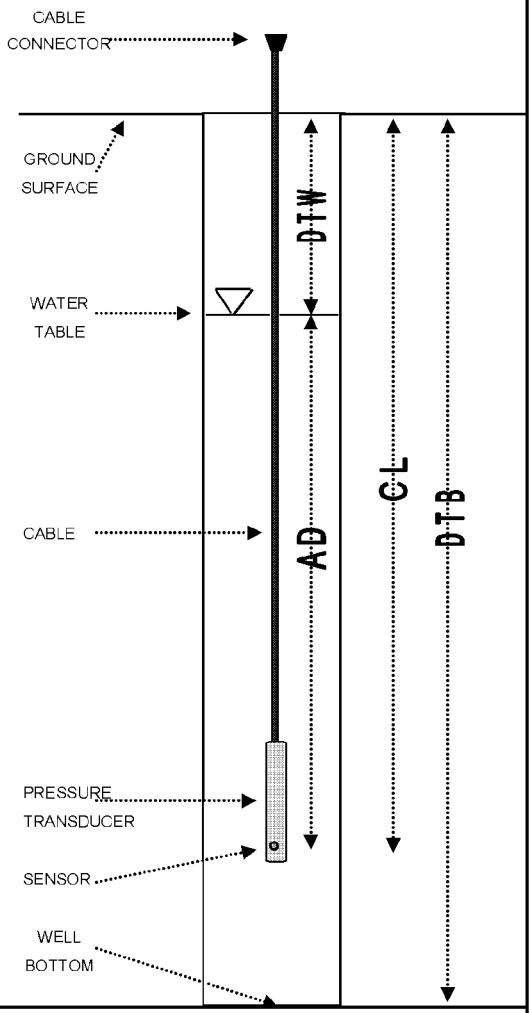
MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	63.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	48.760	DATE	12/13/10
PSI CAPACITY	30	CASING ELEVATION (FT)	48.021		
SERIAL NUMBER	11331	CASING DIAMETER (INCH)	2		

	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)	33.25
GZA ENGINEER	M. Britos		

ELEVATION OF MEASURING POINT - DEPTH TO WATER = REFERENCE ELEVATION (WATER TABLE ELEVATION)

DEPTH TO WATER + ACTUAL DEPTH = CABLE LENGTH (if transducer is functioning properly)

DEPTH TO BOTTOM:		28.00	FT
GROUND ELEVATION:		48.760	FT M.S.L.
CASING ELEVATION:		48.021	FT M.S.L.
CASING ABOVE (+) OR BELOW (-) GROUND:		below	
DISTANCE FROM CASING TO GROUND (+ OR -):		-0.739	FT
MEASURED CABLE LENGTH:		--	FT
TIME OF MEASUREMENT:		1154	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		14.77	FT
ACTUAL DEPTH:	+	25.840	FT
THEORETICAL CABLE LENGTH:	=	40.610	FT
HAVE CLOCKS BEEN SYNCHRONIZED?		☑	check
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?		☑	check
ELEVATION OF MEASURING POINT:		48.021	FT M.S.L.
DEPTH TO WATER:	−	14.77	FT
REFERENCE ELEVATION:	=	33.251	FT M.S.L.
TEST NAME:		MW-43-28	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		1154	HRS



LEGEND:
DTW - DEPTH TO WATER
DTB - DEPTH TO BOTTOM OF WELL
AD - ACTUAL DEPTH OF TRANSDUCER UNDER WATER
CL - CABLE LENGTH FROM SENSOR TO GROUND SURFACE/ TOP OF CASING

NOTES:

Difference -0.772. Reset.

TRANSDUCER INSTALLATION LOG

GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-50-66
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	67.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	14.92	DATE	11/12/10
PSI CAPACITY	30	CASING ELEVATION (FT)	14.61		
SERIAL NUMBER	14459	CASING DIAMETER (INCH)	1		

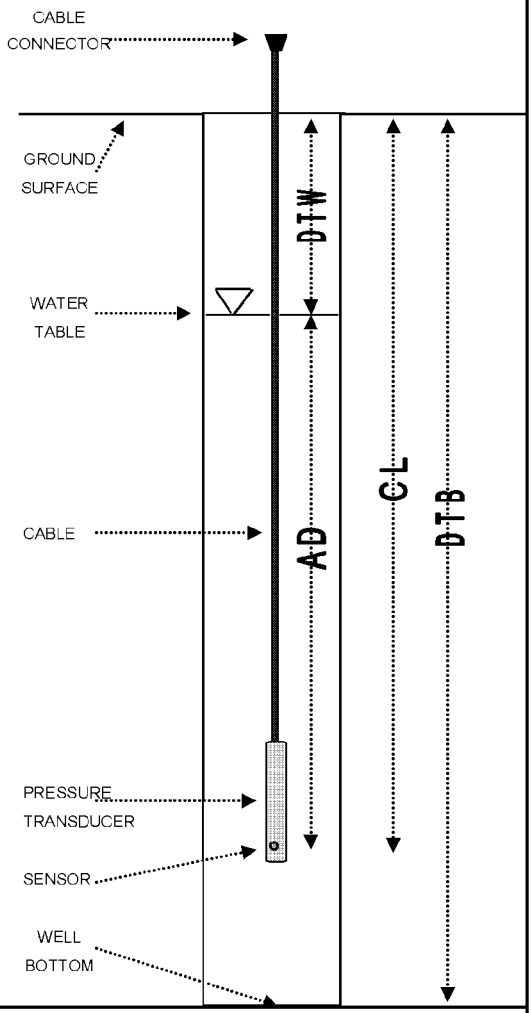
C. Benmergui — GZA ENGINEER
M. Britos

STATIC GROUNDWATER TABLE ELEVATION (FT): 4.02

ELEVATION OF MEASURING POINT - DEPTH TO WATER = REFERENCE ELEVATION (WATER TABLE ELEVATION)

DEPTH TO WATER + ACTUAL DEPTH = CABLE LENGTH (if transducer is functioning properly)

DEPTH TO BOTTOM:	65.75	FT	
GROUND ELEVATION:	14.92	FT M.S.L.	
CASING ELEVATION:	14.61	FT M.S.L.	
CASING ABOVE (+) OR BELOW (-) GROUND:	below		
DISTANCE FROM CASING TO GROUND (+ OR -):	-0.31	FT	
MEASURED CABLE LENGTH:	--	FT	
TIME OF MEASUREMENT:		HRS	
MEASUREMENT TAKEN FROM:	TOC		
DEPTH TO WATER:	10.59	FT	
ACTUAL DEPTH:	+	FT	
THEORETICAL CABLE LENGTH:	= 10.590	FT	
HAVE CLOCKS BEEN SYNCHRONIZED?	☑	check	
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?	☑	check	
ELEVATION OF MEASURING POINT:	14.614	FT M.S.L.	
DEPTH TO WATER:	− 10.59	FT	
REFERENCE ELEVATION:	= 4.024	FT M.S.L.	
TEST NAME:	MW-50-66		
LOGGING INTERVAL:	20	MIN	
TEST START TIME:		HRS	



LEGEND:
DTW - DEPTH TO WATER
DTB - DEPTH TO BOTTOM OF WELL
AD - ACTUAL DEPTH OF TRANSDUCER UNDER WATER
CL - CABLE LENGTH FROM SENSOR TO GROUND SURFACE/ TOP OF CASING

NOTES:

TRANSDUCER INSTALLATION LOG

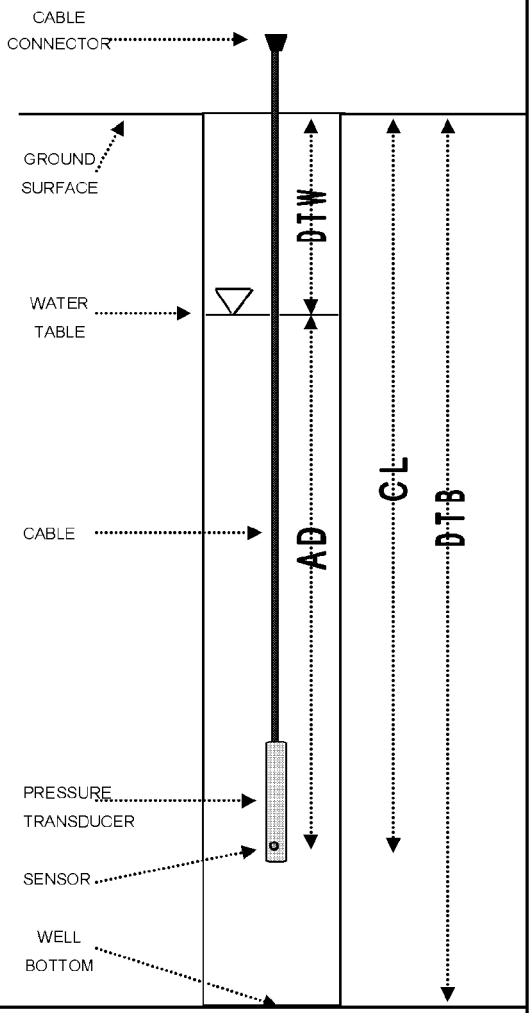
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-58-65
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	72.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	14.57	DATE	11/11/10
PSI CAPACITY	30	CASING ELEVATION (FT)	14.25		
SERIAL NUMBER	5619	CASING DIAMETER (INCH)	1		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			7.04
GZA ENGINEER	M. Britos				

ELEVATION OF MEASURING POINT - DEPTH TO WATER = REFERENCE ELEVATION (WATER TABLE ELEVATION)

DEPTH TO WATER + ACTUAL DEPTH = CABLE LENGTH (if transducer is functioning properly)

DEPTH TO BOTTOM:		65.00	FT
GROUND ELEVATION:		14.57	FT M.S.L.
CASING ELEVATION:		14.25	FT M.S.L.
CASING ABOVE (+) OR BELOW (-) GROUND:		below	
DISTANCE FROM CASING TO GROUND (+ OR -):		-0.32	FT
MEASURED CABLE LENGTH:		--	FT
TIME OF MEASUREMENT:			HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		7.21	FT
ACTUAL DEPTH:	+		FT
THEORETICAL CABLE LENGTH:	=	7.210	FT
HAVE CLOCKS BEEN SYNCHRONIZED?		☑	check
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?		☑	check
ELEVATION OF MEASURING POINT:		14.25	FT M.S.L.
DEPTH TO WATER:	−	7.21	FT
REFERENCE ELEVATION:	=	7.04	FT M.S.L.
TEST NAME:		MW-58-65	
LOGGING INTERVAL:		20	MIN
TEST START TIME:			HRS



LEGEND:
DTW - DEPTH TO WATER
DTB - DEPTH TO BOTTOM OF WELL
AD - ACTUAL DEPTH OF TRANSDUCER UNDER WATER
CL - CABLE LENGTH FROM SENSOR TO GROUND SURFACE/ TOP OF CASING

NOTES:

Off by -0.574. Reset.

TRANSDUCER INSTALLATION LOG

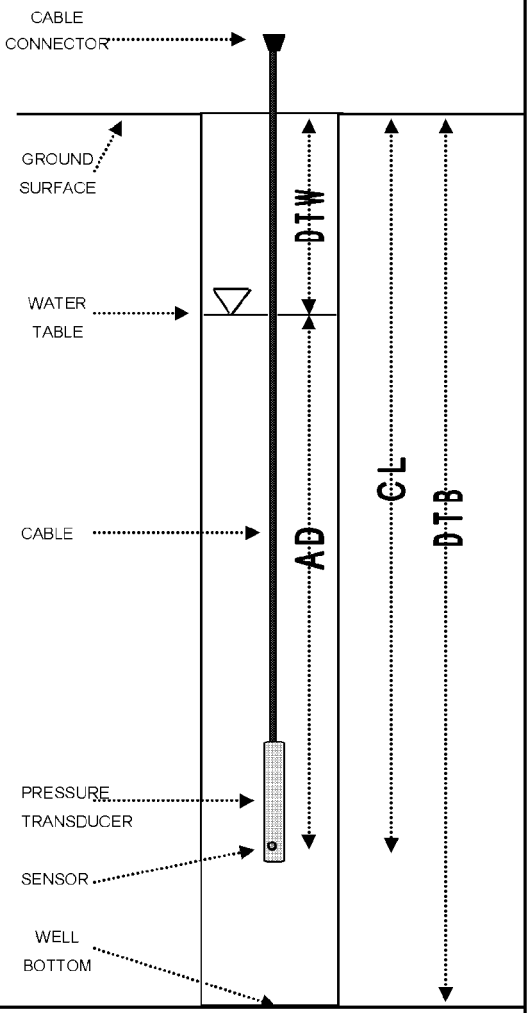
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	MW-66-21
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	37.00	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	14.122	DATE	11/10/10
PSI CAPACITY	30	CASING ELEVATION (FT)	13.407		
SERIAL NUMBER	15849	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			0.74
GZA ENGINEER	M. Britos				

ELEVATION OF MEASURING POINT - DEPTH TO WATER = REFERENCE ELEVATION (WATER TABLE ELEVATION)

DEPTH TO WATER + ACTUAL DEPTH = CABLE LENGTH (if transducer is functioning properly)

DEPTH TO BOTTOM:		21.00	FT
GROUND ELEVATION:		14.122	FT M.S.L.
CASING ELEVATION:		13.407	FT M.S.L.
CASING ABOVE (+) OR BELOW (-) GROUND:		below	
DISTANCE FROM CASING TO GROUND (+ OR -):		-0.72	FT
MEASURED CABLE LENGTH		--	FT
TIME OF MEASUREMENT:		1004	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		12.67	FT
ACTUAL DEPTH:	+	9.83	FT
THEORETICAL CABLE LENGTH:	=	22.50	FT
HAVE CLOCKS BEEN SYNCHRONIZED?		☑	check
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?		☑	check
ELEVATION OF MEASURING POINT:		13.407	FT M.S.L.
DEPTH TO WATER:	−	12.67	FT
REFERENCE ELEVATION:	=	0.737	FT M.S.L.
TEST NAME:		MW-66-21	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		1004	HRS



LEGEND:
DTW - DEPTH TO WATER
DTB - DEPTH TO BOTTOM OF WELL
AD - ACTUAL DEPTH OF TRANSDUCER UNDER WATER
CL - CABLE LENGTH FROM SENSOR TO GROUND SURFACE/ TOP OF CASING

NOTES:

TRANSDUCER INSTALLATION LOG

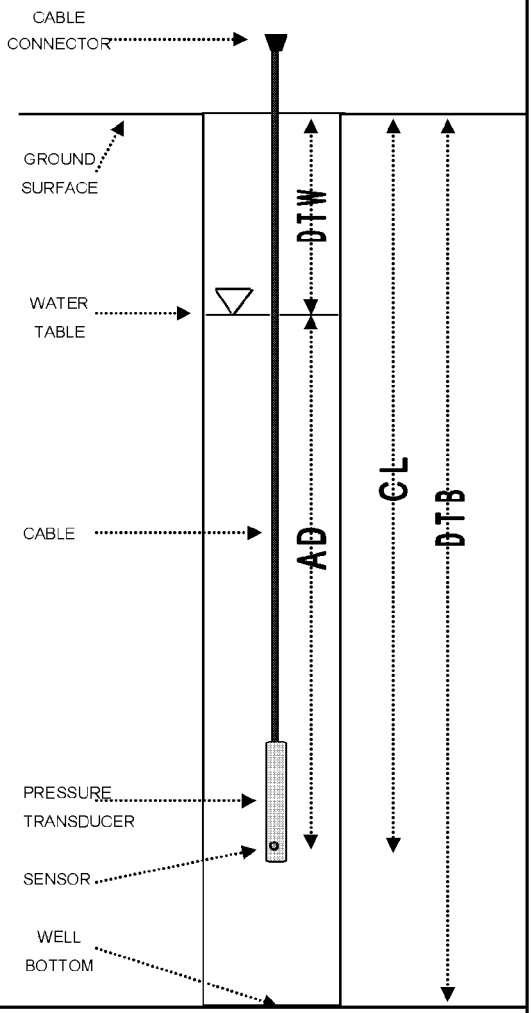
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	U3-C1-2
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	NA	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	15.003	DATE	12/6/10
PSI CAPACITY	30	CASING ELEVATION (FT)	18.060		
SERIAL NUMBER	11949	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			3.16
GZA ENGINEER	M. Britos				

ELEVATION OF MEASURING POINT - DEPTH TO WATER = REFERENCE ELEVATION (WATER TABLE ELEVATION)

DEPTH TO WATER + ACTUAL DEPTH = CABLE LENGTH (if transducer is functioning properly)

DEPTH TO BOTTOM:		NA	FT
GROUND ELEVATION:		15.003	FT M.S.L.
CASING ELEVATION:		18.060	FT M.S.L.
CASING ABOVE (+) OR BELOW (-) GROUND:		above	
DISTANCE FROM CASING TO GROUND (+ OR -):		3.057	FT
MEASURED CABLE LENGTH:		--	FT
TIME OF MEASUREMENT:		1425	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		14.90	FT
ACTUAL DEPTH:	+	-17.471	FT
THEORETICAL CABLE LENGTH:	=	-2.571	FT
HAVE CLOCKS BEEN SYNCHRONIZED?		☑	check
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?		☑	check
ELEVATION OF MEASURING POINT:		18.060	FT M.S.L.
DEPTH TO WATER:	−	14.90	FT
REFERENCE ELEVATION:	=	3.160	FT M.S.L.
TEST NAME:		U3-C1-2	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		1425	HRS



LEGEND:
DTW - DEPTH TO WATER
DTB - DEPTH TO BOTTOM OF WELL
AD - ACTUAL DEPTH OF TRANSDUCER UNDER WATER
CL - CABLE LENGTH FROM SENSOR TO GROUND SURFACE/ TOP OF CASING

NOTES:

Reset and clean. Difference >17'.

TRANSDUCER INSTALLATION LOG

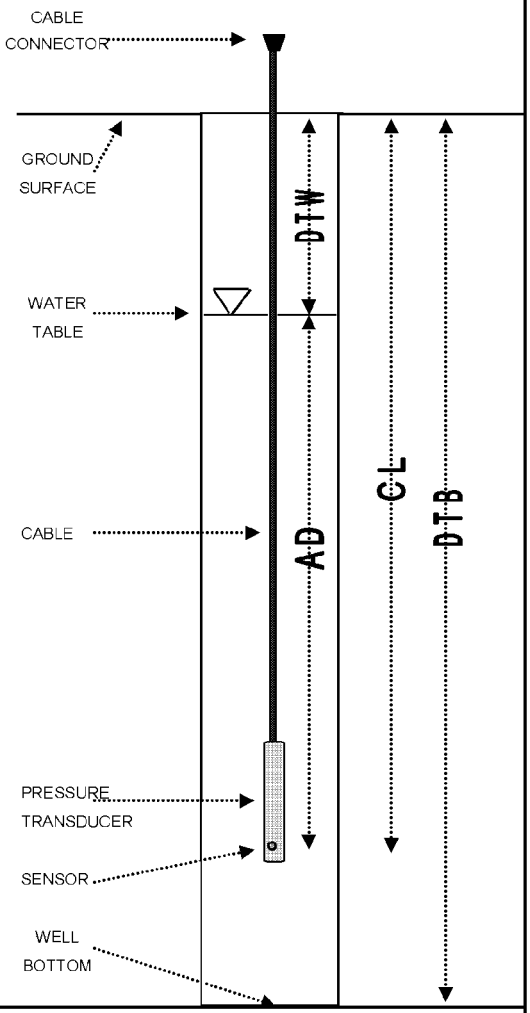
GZA GEOENVIRONMENTAL OF NEW YORK 440 NINTH AVENUE, 18th FLOOR NEW YORK, NEW YORK 10001 SCIENTISTS AND ENGINEERS	Client Entergy Indian Point Energy Center	WELL ID	U3-C1
		SHEET	1 of 1
		FILE NO.	01.0017869.92
		PROJECT LOCATION	Indian Point

MANUFACTURER	In-Situ	FINAL BORING DEPTH (FT)	NA	DATUM	NGVD 29
MAKE	MiniTroll	GROUND ELEVATION (FT)	15.003	DATE	12/6/10
PSI CAPACITY	30	CASING ELEVATION (FT)	18.060		
SERIAL NUMBER	5548	CASING DIAMETER (INCH)	2		
	C. Benmergui	STATIC GROUNDWATER TABLE ELEVATION (FT)			3.46
GZA ENGINEER	M. Britos				

ELEVATION OF MEASURING POINT - DEPTH TO WATER = REFERENCE ELEVATION (WATER TABLE ELEVATION)

DEPTH TO WATER + ACTUAL DEPTH = CABLE LENGTH (if transducer is functioning properly)

DEPTH TO BOTTOM:		NA	FT
GROUND ELEVATION:		15.003	FT M.S.L.
CASING ELEVATION:		18.060	FT M.S.L.
CASING ABOVE (+) OR BELOW (-) GROUND:		above	
DISTANCE FROM CASING TO GROUND (+ OR -):		3.057	FT
MEASURED CABLE LENGTH:		--	FT
TIME OF MEASUREMENT:		1405	HRS
MEASUREMENT TAKEN FROM:		TOC	
DEPTH TO WATER:		14.60	FT
ACTUAL DEPTH:	+	13.622	FT
THEORETICAL CABLE LENGTH:	=	28.222	FT
HAVE CLOCKS BEEN SYNCHRONIZED?		☑	check
IS TRANSDUCER SET TO TAKE "SURFACE" READINGS?		☑	check
ELEVATION OF MEASURING POINT:		18.060	FT M.S.L.
DEPTH TO WATER:	-	14.60	FT
REFERENCE ELEVATION:	=	3.460	FT M.S.L.
TEST NAME:		U3-C1	
LOGGING INTERVAL:		20	MIN
TEST START TIME:		1405	HRS



LEGEND:
DTW - DEPTH TO WATER
DTB - DEPTH TO BOTTOM OF WELL
AD - ACTUAL DEPTH OF TRANSDUCER UNDER WATER
CL - CABLE LENGTH FROM SENSOR TO GROUND SURFACE/ TOP OF CASING

NOTES:

Difference -2.379. Reset.
Tranducer reading = 3.436
Reference Elevation =3.622
Difference of 0.186 at time of programming due to water level change. Cleaned transducer.

GZA

WELL ID : U3-C1

APPENDIX C: CHAINS OF CUSTODY

IPEC00266330

Page: 1 of 1
Project #: Entergy GW Mon Prog
WL# Quote #:
COC Number (1)
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy Phone #: (914) 736-8405

Project/Site Name: Indian Point Energy Center Fax #: (914) 734-6247

Address: 450 Broadway, Suite 3, Buchanan, NY 10511

Collected by: CB, MB Send Results To: Patrick Donahue

Sample Analysis Requested (5) (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Should this sample be considered: Radioactive	Should this sample be considered: TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)	<-- Preservative Type (6)	Comments
MW-45-42-(022)	10/22/10	1510	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	Note: extra sample is required for sample specific QC
MW-45-61-(022)	10/22/10	1154	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	

TAT Requested: Normal: ✓ Rush: _____ Specify: _____ (Subject to Surcharge)

Fax Results: Yes / (No)

Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone
(Eastern) Pacific
Central Other _____
Mountain

Chain of Custody Signatures

	Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	[signature]	10/22/10	1550	SECURE STORAGE	10/22/10	1550
2						
3						

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT

Method of Shipment: FEDEX Date Shipped:

Airbill #:

Airbill #:

1 - Chain of Custody Number = Client Determined

2 - QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite

3 - Field Filtered: For liquid matrices, indicate with a "Y" for yes the sample was field filtered or "N" for sample was not field filtered.

4 - Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal

5 - Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1).

6 - Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

For Lab Receiving Use Only

Custody Seal Intact? YES NO

Cooler Temp: _____ C

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00266331

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number (1):
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy Phone #: (914) 736-8405

Project/Site Name: Indian Point Energy Center Fax #: (914) 734-6247

Address: 450 Broadway, Suite 3, Buchanan, NY 10511

Collected by: CB/MB Send Results To: Patrick Donahue

Sample Analysis Requested (5) (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Should this sample be considered: Radioactive	Should this sample be considered: TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)							<-- Preservative Type (6)
MW-43-28-(017)	10/25/10	1129	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-43-62-(017)	10/25/10	1106	N	N	GW	Y	N	1	1	1	1							2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

TAT Requested: Normal: ✓ Rush: _ Specify: _____ (Subject to Surcharge)

Fax Results: Yes / (No)

Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone
(Eastern) Pacific
Central Other _____
Mountain

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1 Cheryl Bryan	10/25/10	1040	1 SECURE STORAGE	10/25/10	1040
2			2		
3			3		

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX Date Shipped:
Airbill #:
Airbill #:

1.) Chain of Custody Number = Client Determined

2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite

3.) Field Filtered: For liquid matrices, indicate with a "Y" for yes the sample was field filtered or "N" for sample was not field filtered.

4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Miscellaneous Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal

5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1).

6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

For Lab Receiving Use Only
Custody Seal Intact?
YES NO
Cooler Temp: _____ C

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00266332

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy Phone #: (914) 736-8405

Project/Site Name: Indian Point Energy Center Fax #: (914) 734-6247

Address: 450 Broadway, Suite 3, Buchanan, NY 10511

Collected by: CB, MB Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive	Should this sample be considered: TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr-90)	<-- Preservative Type (6)	Comments
MW-41-40-(018)	10/25/10	1606	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-41-63-(017)	10/25/10	1210	N	N	GW	Y	N	1	1	1	1		2 Liter Poly

Note: extra sample is required for sample specific QC

TAT Requested: Normal: ✓ Rush: _____ Specify: _____ (Subject to Surcharge)

Fax Results: Yes / (No)

Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone: (Eastern) Central Mountain Pacific Other _____

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	10/25/10	1640	SECURE STORAGE	10/25/10	1640
2			2		
3			3		

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT

Method of Shipment: FEDEX Date Shipped:

Airbill #:

Airbill #:

1) Chain of Custody Number = Client Determined

2) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite

3) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered

4) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal

5) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1)

6) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

For Lab Receiving Use Only

Custody Seal Intact? YES NO

Cooler Temp: _____ C

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00266333

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy Phone #: (914) 736-8405

Project/Site Name: Indian Point Energy Center Fax #: (914) 734-6247

Address: 450 Broadway, Suite 3, Buchanan, NY 10511

Collected by: CB, MB Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive	Should this sample be considered: TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)	<-- Preservative Type (6)	Comments
MW-44-102-(019)	10/26/10	1332	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	Note: extra sample is required for sample specific QC
MW-44-66-(018)	10/26/10	1446	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	

TAT Requested: Normal: ✓ Rush: _____ Specify: _____ (Subject to Surcharge)

Fax Results: Yes / (No)

Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone
(Eastern) Pacific
Central Other _____
Mountain

Chain of Custody Signatures

	Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	[signature]	10/26/10	1525	SECURE STORAGE	10/26/10	1525
2	[signature]					
3						

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX Date Shipped:
Airbill #:
Airbill #:

1) Chain of Custody Number = Client Determined
2) QC Codes: N = Normal Sample TB = Trip Blank FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered.
4) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal
5) Sample Analysis Requested: Analytical method requested (i.e. *8260B, 6010B/7470A*) and number of containers provided for each (i.e. *8260B - 3, 6010B/7470A - 1*).
6) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp: _____ C

WHITE – LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00266334

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy Phone #: (914) 736-8405

Project/Site Name: Indian Point Energy Center Fax #: (914) 734-6247

Address: 450 Broadway, Suite 3, Buchanan, NY 10511

Collected by: CB, MB Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive	Should this sample be considered: TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)	Nickel 63 (Ni63)						<-- Preservative Type (6)	Comments
MW-42-49-(023)	10/27/10	1223	N	N	GW	Y	N	1	1	1	1	1						2 Liter Poly	Note: extra sample is required for sample specific QC
MW-42-78-(018)	10/27/10	1356	N	N	GW	Y	N	1	1	1	1	1						2 Liter Poly	

TAT Requested: Normal: ✓ Rush: _____ Specify: _____ (Subject to Surcharge)

Fax Results: Yes / (No)

Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone
(Eastern) Central Mountain Pacific Other _____

Chain of Custody Signatures

Relinquished By (Signed) Date Time	Received by (signed) Date Time
1 [signature] 10/27/10 1650	1 SECURE STORAGE 10/27/10 1650
2	2
3	3

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT

Method of Shipment: FEDEX Date Shipped:

Airbill #:

Airbill #:

1) Chain of Custody Number = Client Determined

2) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite

3) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered.

4) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal

5) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1)

6) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SR = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate. If no preservative is added = leave Field blank.

For Lab Receiving Use Only

Custody Seal Intact? *YES* *NO*

Cooler Temp: *C*

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00266335

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy Phone #: (914) 736-8405

Project/Site Name: Indian Point Energy Center Fax #: (914) 734-6247

Address: 450 Broadway, Suite 3, Buchanan, NY 10511

Collected by: CB, MB Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code 2	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive	Should this sample be considered: TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)	<-- Preservative Type (6)	Comments
MW-53-120-(021)	10/27/10	1248	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	Note: extra sample is required for sample specific QC
MW-53-82-(017)	10/27/10	1207	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	

TAT Requested: Normal: ✓ Rush: _____ Specify: _____ (Subject to Surcharge)

Fax Results: Yes / (No)

Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone
(Eastern) Pacific
Central Other _____
Mountain

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	10/27/10	1650	1 SECURED STORAGE	10/27/10	1650
2			2		
3			3		

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX Date Shipped:
Airbill #:
Airbill #:

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp: _____ C

1) Chain of Custody Number = Client Determined

2) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite

3) Field Filtered: For liquid matrices, indicate with a "Y" for yes the sample was field filtered or "N" for sample was not field filtered

4) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal

5) Sample Analysis Requested: Analytical method requested (i.e. *8260B, 6010B/7470A*, and number of containers provided for each (i.e. *8260B - 3, 6010B/7470A - 1*).

6) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00266336

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy Phone #: (914) 736-8405

Project/Site Name: Indian Point Energy Center Fax #: (914) 734-6247

Address: 450 Broadway, Suite 3, Buchanan, NY 10511

Collected by: CB, MB Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive	Should this sample be considered: TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)	<-- Preservative Type (6)	Comments
U3-4D-(026)	10/28/10	1404	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	Note: extra sample is required for sample specific QC

TAT Requested: Normal: ✓ Rush: _____ Specify: _____ (Subject to Surcharge)

Fax Results: Yes / (No)

Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone
(Eastern) Pacific
Central Other _____
Mountain

Chain of Custody Signatures

	Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	[signature]	10/28/10	1530	SECURED STORAGE	10/28/10	1530
2						
3						

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX Date Shipped:
Airbill #:
Airbill #:

1) Chain of Custody Number = Client Determined

2) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite

3) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered

4) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal

5) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B 3, 6010B/7470A 1)

6) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp: _____ C

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00266337

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy — Phone #: (914) 736-8405

Project/Site Name: Indian Point Energy Center — Fax #: (914) 734-6247

Address: 450 Broadway, Suite 3, Buchanan, NY 10511

Collected by: CD, MB — Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive	Should this sample be considered: TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)	<-- Preservative Type (6)
MW-46-(022)	10/28/10	1325	N	N	GW	Y	N	1	1	1	1	2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

TAT Requested: Normal: ✓ Rush: ____ Specify: ____ (Subject to Surcharge)

Fax Results: Yes / (No)

Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone
(Eastern) Pacific
Central Other ____
Mountain

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1		10/28/10	1538	1 SECURE STORAGE	10/28/10 1530
2				2	
3				3	

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX — Date Shipped:
Airbill #:
Airbill #:

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp: ____ C

1) Chain of Custody Number = Client Determined

2) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite

3) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered

4) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal

5) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1)

6) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00266338

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556 8171
Fax: (843) 766-1178

Client Name: Entergy Phone #: (914) 736-8405

Project/Site Name: Indian Point Energy Center Fax #: (914) 734-6247

Address: 450 Broadway, Suite 3, Buchanan, NY 10511

Collected by: C6, MB Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive	Should this sample be considered: TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr-90)								<-- Preservative Type (6)	Comments
U3-T1-(030)	10/29/10	1604	N	N	GW	Y	N	1	1	1	1								2 Liter Poly	Note: extra sample is required for sample specific QC
U3-T2-(035)	10/29/10	1122	N	N	GW	Y	N	1	1	1	1								2 Liter Poly	

TAT Requested: Normal: ✓ Rush _____ Specify: _____ (Subject to Surcharge) Fax Results: Yes / (No)

Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone
(Eastern) Pacific
Central Other _____
Mountain

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	10/29/10	1630	1 SECURE STORAGE	10/29/10	1630
2			2		
3			3		

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT

Method of Shipment: FEDEX Date Shipped:

Airbill #:

Airbill #:

1.) Chain of Custody Number = Client Determined

2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite

3.) Field Filtered - For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered.

4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal

5.) Sample Analysis Requested - Analytical method requested (i.e. *8260B, 6010B/7470A*) and number of containers provided for each (i.e. *8260B - 3, 6010B/7470A - 1*).

6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

For Lab Receiving Use Only

Custody Seal Intact?
YES NO

Cooler Temp:
_____ C

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00266339

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy Phone #: (914) 736-8405

Project/Site Name: Indian Point Energy Center Fax #: (914) 734-6247

Address: 450 Broadway, Suite 3, Buchanan, NY 10511

Collected by: CB, MB Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive	Should this sample be considered: TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)							<-- Preservative Type (6)
MW-111-(035)	11/01/10	1455	N	N	GW	Y	N	1	1	1	1							2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

TAT Requested: Normal: ✓ Rush: ____ Specify: ____ (Subject to Surcharge) Fax Results: Yes / (No)

Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone
(Eastern) Pacific
Central Other ____
Mountain

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	11/01/10	1530	SECURED STORAGE	11/01/10	1530
2			2		
3			3		

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX Date Shipped:
Airbill #:
Airbill #:

1.) Chain of Custody Number = Client Determined
2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered
4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal
5.) Sample Analysis Requested: Analytical method requested (i.e. *8260B, 6010B/7470A*) and number of containers provided for each (i.e. *8260B - 3, 6010B/7470A - 1*)
6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp: ____ C

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00266340

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number (1):
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy Phone #: (914) 736-8405

Project/Site Name: Indian Point Energy Center Fax #: (914) 734-6247

Address: 450 Broadway, Suite 3, Buchanan, NY 10511

Collected by: CB, MB Send Results To: Patrick Donahue

Sample Analysis Requested (5) (Fill in the number of containers for each test)

Sample ID * For Composites - indicate start and stop date/time	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Should this sample be considered: Radioactive	Should this sample be considered: TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr-90)	Nickel 63 (Ni63)	<-- Preservative Type (6)	Comments
MW-55-24-(016)	11/01/10	1410	N	N	GW	Y	N	1	1	1	1	1	2 Liter Poly	Note: extra sample is required for sample specific QC
MW-55-35-(015)	11/01/10	1426	N	N	GW	Y	N	1	1	1	1	1	2 Liter Poly	
MW-55-54-(016)	11/01/10	1336	N	N	GW	Y	N	1	1	1	1	1	2 Liter Poly	

TAT Requested: Normal: ✓ Rush: _____ Specify: _____ (Subject to Surcharge)

Fax Results: Yes / (No)

Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone: (Eastern) Central Mountain Pacific Other _____

Chain of Custody Signatures

	Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	[signature]	11/01/10	1530	SECURE STORAGE	11/01/10	1530
2						
3						

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT

Method of Shipment: FEDEX Date Shipped:

Airbill #:

Airbill #:

For Lab Receiving Use Only

Custody Seal Intact? YES NO

Cooler Temp: _____ C

1 - Chain of Custody Number = Client Determined

2 - QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite

3 - Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered.

4 - Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal

5 - Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1)

6 - Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00266341

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy Phone #: (914) 736-8405

Project/Site Name: Indian Point Energy Center Fax #: (914) 734-6247

Address: 450 Broadway, Suite 3, Buchanan, NY 10511

Collected by: CB, MB Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID * For composites - indicate start and stop date/time	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive	Should this sample be considered: TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr-90)	<-- Preservative Type (6)
U3-4S-(002)	10/29/10	1140	N	N	GW	Y	N	1	1	1	1	2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

TAT Requested: Normal: ✓ Rush: _____ Specify: _____ (Subject to Surcharge)

Fax Results: Yes / (No)

Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone
(Eastern) Pacific
Central Other _____
Mountain

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	10/29/10	1630	1 SECURE STORAGE	10/29/10	1630
2			2		
3			3		

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX Date Shipped:
Airbill #:
Airbill #:

1.) Chain of Custody Number = Client Determined

2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite

3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered.

4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal

5.) Sample Analysis Requested: Analytical method requested (i.e. *8260B*, *6010B/7470A*) and number of containers provided for each (i.e. *8260B* - 3, *6010B/7470A* - 1).

6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp: _____ C

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00266342

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number (1):
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy — Phone #: (914) 736-8405
Project/Site Name: Indian Point Energy Center — Fax #: (914) 734-6247
Address: 450 Broadway, Suite 3, Buchanan, NY 10511
Collected by: CB, MB — Send Results To: Patrick Donahue

Sample Analysis Requested (5) (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Should this sample be considered: Radioactive	Should this sample be considered: TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr-90)	<-- Preservative Type (6)	Comments
MW-63-112-(015)	11/02/10	1505	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	Note: extra sample is required for sample specific QC
MW-63-121-(015)	11/02/10	1146	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	
MW-63-163-(015)	11/02/10	1149	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	
MW-63-174-(015)	11/02/10	1150	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	
MW-63-18-(015)	11/02/10	1222	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	
MW-63-34-(015)	11/02/10	1304	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	
MW-63-50-(015)	11/02/10	1507	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	
MW-63-93-(016)	11/02/10	1508	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	

TAT Requested: Normal: ✓ Rush: _____ Specify: _____ (Subject to Surcharge)
Fax Results: Yes / (No)
Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone
(Eastern) Pacific
Central Other _____
Mountain

Chain of Custody Signatures

	Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	[signature]	11/02/10	1555	SECURE STORAGE	11/02/10	1555
2						
3						

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX — Date Shipped:
Airbill #:
Airbill #:

1.) Chain of Custody Number = Client Determined
2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered.
4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal
5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1)
6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp: _____ C

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00266343

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy Phone #: (914) 736-8405

Project/Site Name: Indian Point Energy Center Fax #: (914) 734-6247

Address: 450 Broadway, Suite 3, Buchanan, NY 10511

Collected by: CB, MB Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive	Should this sample be considered: TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (S-90)	<-- Preservative Type (6)	Comments
MW-31-49-(028)	11/03/10	1155	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-31-63-(028)	11/03/10	1232	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-31-85-(028)	11/03/10	1200	N	N	GW	Y	N	1	1	1	1		2 Liter Poly

Note: extra sample is required for sample specific QC

TAT Requested: Normal: ✓ Rush: _____ Specify: _____ (Subject to Surcharge) Fax Results: Yes / (No)

Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone
(Eastern) Pacific
Central Other _____
Mountain

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1 [signature]	11/2/10	1700	1 SECURE STORAGE	11/3/10	1700
2			2		
3			3		

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX Date Shipped:
Airbill #:
Airbill #:

1) Chain of Custody Number = Client Determined
2) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered.
4) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal
5) Sample Analysis Requested: Analytical method requested (i.e. *8260B, 6010B/7470A*) and number of containers provided for each (i.e. *8260B - 3, 6010B/7470A - 1*)
6) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

For Lab Receiving Use Only
Custody Seal Intact? *YES* *NO*
Cooler Temp: _____ C

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00266344

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy Phone #: (914) 736-8405

Project/Site Name: Indian Point Energy Center Fax #: (914) 734-6247

Address: 450 Broadway, Suite 3, Buchanan, NY 10511

Collected by: CB, MB Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID * For composites - indicate start and stop date/time	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive	Should this sample be considered: TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)	<-- Preservative Type (6)
MW-32-149-(022)	11/03/10	1609	N	N	GW	Y	N	1	1	1	1	2 Liter Poly
MW-32-173-(020)	11/03/10	1553	N	N	GW	Y	N	1	1	1	1	2 Liter Poly
MW-32-190-(024)	11/03/10	1607	N	N	GW	Y	N	1	1	1	1	2 Liter Poly
MW-32-59-(022)	11/03/10	1208	N	N	GW	Y	N	1	1	1	1	2 Liter Poly
MW-32-85-(025)	11/03/10	1245	N	N	GW	Y	N	1	1	1	1	2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

TAT Requested: Normal: ✓ Rush: ____ Specify: ____ (Subject to Surcharge)

Fax Results: Yes / (No)

Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone
(Eastern) Pacific
Central Other ____
Mountain

Chain of Custody Signatures

	Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	Cyj Bym	11/3/10	1700	SECURE STORAGE	11/3/10	1700
2						
3						

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX Date Shipped:
Airbill #:
Airbill #:

1) Chain of Custody Number = Client Determined
2) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered.
4) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal
5) Sample Analysis Requested: Analytical method requested (i.e. *8260B, 6010B/7470A*) and number of containers provided for each (i.e. *8260B - 3, 6010B/7470A - 1*).
6) Preservative Type: **HA** = Hydrochloric Acid, **NI** = Nitric Acid, **SH** = Sodium Hydroxide, **SA** = Sulfuric Acid, **AA** = Ascorbic Acid, **HX** = Hexane, **ST** = Sodium Thiosulfate, If no preservative is added = leave field blank

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp: ____ C

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00266345

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy — Phone #: (914) 736-8405

Project/Site Name: Indian Point Energy Center — Fax #: (914) 734-6247

Address: 450 Broadway, Suite 3, Buchanan, NY 10511

Collected by: CB, MB — Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive	Should this sample be considered: TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)	<-- Preservative Type (6)
MW-36-24-(020)	11/04/10	1615	N	N	GW	Y	N	1	1	1	1	2 Liter Poly
MW-36-41-(014)	11/04/10	1655	N	N	GW	Y	N	1	1	1	1	2 Liter Poly
MW-36-52-(019)	11/04/10	1555	N	N	GW	Y	N	1	1	1	1	2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

TAT Requested: Normal: ✓ Rush: Specify: (Subject to Surcharge)

Fax Results: Yes / (No)

Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone
(Eastern) Pacific
Central Other _____
Mountain

Chain of Custody Signatures

	Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1		11/04/10	1730	SECURED STORAGE	11/04/10	1730
2						
3						

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX — Date Shipped:
Airbill #:
Airbill #:

1.) Chain of Custody Number = Client Determined

2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite

3.) Field Filtered: For liquid matrices, indicate with a "Y" for yes the sample was field filtered or "N" for sample was not field filtered

4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Miscellaneous Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal

5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1).

6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate. If no preservative is added = leave field blank

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp: _____ C

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00266346

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy — Phone #: (914) 736-8405

Project/Site Name: Indian Point Energy Center — Fax #: (914) 734-6247

Address: 450 Broadway, Suite 3, Buchanan, NY 10511

Collected by: CB, MB — Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive	Should this sample be considered: TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)	<-- Preservative Type (6)	Comments
MW-37-22-(020)	11/04/10	1428	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	Note: extra sample is required for sample specific QC
MW-37-32-(020)	11/04/10	1314	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	
MW-37-40-(020)	11/04/10	1206	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	
MW-37-57-(020)	11/04/10	1349	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	

TAT Requested: Normal: ✓ Rush: _____ Specify: _____ (Subject to Surcharge)

Fax Results: Yes / (No)

Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone: (Eastern) Central Mountain Pacific Other _____

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1 [signature]	11/04/10	1730	1 SECURE STORAGE	11/04/10	1730
2			2		
3			3		

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT

Method of Shipment: FEDEX — Date Shipped:

Airbill #:

Airbill #:

1.) Chain of Custody Number = Client Determined

2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite

3.) Field Filtered: For liquid matrices, indicate with a "Y" for yes the sample was field filtered or "N" for sample was not field filtered

4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal

5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1).

6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate. If no preservative is added = leave field blank

For Lab Receiving Use Only

Custody Seal Intact? YES NO

Cooler Temp: _____ C

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00266347

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy Phone #: (914) 736-8405

Project/Site Name: Indian Point Energy Center Fax #: (914) 734-6247

Address: 450 Broadway, Suite 3, Buchanan, NY 10511

Collected by: CB, MB Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive	Should this sample be considered: TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)	<-- Preservative Type (6)	Comments
MW-30-69-(036)	11/05/10	1150	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	Note: extra sample is required for sample specific QC
MW-30-84-(027)	11/05/10	1235	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	

TAT Requested: Normal: ✓ Rush: _____ Specify: _____ (Subject to Surcharge) Fax Results: Yes / (No)

Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone
(Eastern) Pacific
Central Other _____
Mountain

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	11/05/10	1320	SECURE STORAGE	11/05/10	1320
2			2		
3			3		

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX Date Shipped:
Airbill #:
Airbill #:

1.) Chain of Custody Number = Client Determined

2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite

3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered.

4.) Matrix Code: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal

5.) Sample Analysis Requested: Analytical method requested (i.e. **8260B**, **6010B/7470A**; and number of containers provided for each (i.e. *8260B - 3, 6010B/7470A - 1*)

6.) Preservative Type: **HA** = Hydrochloric Acid, **NI** = Nitric Acid, **SH** = Sodium Hydroxide, **SA** = Sulfuric Acid, **AA** = Ascorbic Acid, **HX** = Hexane, **ST** = Sodium Thiosulfate, If no preservative is added = leave field blank

For Lab Receiving Use Only
Custody Seal Intact? *YES* *NO*
Cooler Temp: _____ *C*

WHITE = LABORATORY **YELLOW = FILE** **PINK = CLIENT**

IPEC00266348

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy — Phone #: (914) 736-8405

Project/Site Name: Indian Point Energy Center — Fax #: (914) 734-6247

Address: 450 Broadway, Suite 3, Buchanan, NY 10511

Collected by: CB, MB — Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive	Should this sample be considered: TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)	Nickel 63 (Ni63)						<-- Preservative Type (6)
U1-CSS-(015)	11/08/10	1456	N	N	GW	Y	N	1	1	1	1	1						2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

TAT Requested: Normal: ✓ Rush: ____ Specify: ____ (Subject to Surcharge)

Fax Results: Yes / (No)

Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone
(Eastern) Pacific
Central Other ____
Mountain

Chain of Custody Signatures

	Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	[signature]	11/08/10	1530	SECURE STORAGE	11/08/10	1530
2						
3						

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX — Date Shipped:
Airbill #:
Airbill #:

1.) Chain of Custody Number = Client Determined

2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite

3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered

4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal

5.) Sample Analysis Requested: Analytical method requested (i.e. *8260B, 6010B/7470A*) and number of containers provided for each (i.e. *8260B - 3, 6010B/7470A - 1*)

6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp: ____ C

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00266349

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number (1):
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy Phone #: (914) 736-8405

Project/Site Name: Indian Point Energy Center Fax #: (914) 734-6247

Address: 450 Broadway, Suite 3, Buchanan, NY 10511

Collected by: CB, MB Send Results To: Patrick Donahue

Sample Analysis Requested (5) (Fill in the number of containers for each test)

Sample ID * For composites - indicate start and stop date/time	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Should this sample be considered: Radioactive	Should this sample be considered: TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)	<-- Preservative Type (6)	Comments
B-6-(010)	11/08/10	1145	N	N	GW	Y	N	1	1	1	1		2 Liter Poly

Comments: Note: extra sample is required for sample specific QC

TAT Requested: Normal: ✓ Rush: ____ Specify: ____ (Subject to Surcharge)

Fax Results: Yes / (No)

Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone: (Eastern) Central Mountain Pacific Other ____

Chain of Custody Signatures

	Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	[signature]	11/08/10	1530	SECURED STORAGE	11/08/10	1530
2						
3						

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT

Method of Shipment: FEDEX Date Shipped:

Airbill #:

Airbill #:

1) Chain of Custody Number = Client Determined

2) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite

3) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered

4) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Miscellaneous Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal

5) Sample Analysis Requested: Analytical method requested (i.e. *8260B*, *6010B/7470A*) and number of containers provided for each (i.e. *8260B* - 3, *6010B/7470A* - 1).

6) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

For Lab Receiving Use Only

Custody Seal Intact? YES NO

Cooler Temp: ____ C

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00266350

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy — Phone #: (914) 736-8405

Project/Site Name: Indian Point Energy Center — Fax #: (914) 734-6247

Address: 450 Broadway, Suite 3, Buchanan, NY 10511

Collected by: CB, MB — Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive	Should this sample be considered: TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)	<-- Preservative Type (6)	Comments
MW-62-138-(015)	11/09/10	1431	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-62-18-(015)	11/09/10	1157	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-62-182-(015)	11/09/10	1443	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-62 37-(015)	11/09/10	1156	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-62-53-(014)	11/09/10	1249	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-62-71-(015)	11/09/10	1102	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-62-92-(015)	11/09/10	1115	N	N	GW	Y	N	1	1	1	1		2 Liter Poly

TAT Requested: Normal: ✓ Rush: _____ Specify: _____ (Subject to Surcharge)

Fax Results: Yes / (No)

Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone:
(Eastern) Pacific
Central Other _____
Mountain

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1 [signature]	11/09/10	15:15	1 SECURE STORAGE	11/09/10	15:15
2			2		
3			3		

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX — Date Shipped:
Airbill #:
Airbill #:

1.) Chain of Custody Number = Client Determined

2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite

3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered

4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal

5.) Sample Analysis Requested: Analytical method requested (i.e. *8260B - 3, 6010B/7470A - 1*).

6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank.

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp: _____ C

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00266351

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy — Phone #: (914) 736-8405
Project/Site Name: Indian Point Energy Center — Fax #: (914) 734-6247
Address: 450 Broadway, Suite 3, Buchanan, NY 10511
Collected by: CR, MB — Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive	Should this sample be considered: TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)	Nickel 63 (Ni63)	<-- Preservative Type (6)
MW-66-21-(015)	11/10/10	1513	N	N	GW	Y	N	1	1	1	1	1	2 Liter Poly
MW-66-36-(014)	11/10/10	1233	N	N	GW	Y	N	1	1	1	1	1	2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

TAT Requested: Normal: ✓ Rush: ____ Specify: ____ (Subject to Surcharge)
Fax Results: Yes / (No)
Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone
(Eastern) Pacific
Central Other ____
Mountain

Chain of Custody Signatures

	Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	[signature]	11/10/10	1545	SECURED STORAGE	11/10/10	1545
2						
3						

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX — Date Shipped:
Airbill #:
Airbill #:

1) Chain of Custody Number = Client Determined
2) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered
4) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Miso Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal
5) Sample Analysis Requested: Analytical method requested (i.e. *8260B, 6010B/7470A*) and number of containers provided for each (i.e. *8260B - 3, 6010B/7470A - 1*)
6) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp: ____ C

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00266352

Page 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy Phone #: (914) 736-8405

Project/Site Name: Indian Point Energy Center Fax #: (914) 734-6247

Address: 450 Broadway, Suite 3, Buchanan, NY 10511

Collected by: CB, MB Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID * For composites - indicate start and stop date/time	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive	Should this sample be considered: TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr-90)	Nickel 63 (Ni63)	<-- Preservative Type (6)	Comments
MW-67-105-(014)	11/10/10	1142	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-67-173-(015)	11/10/10	1204	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-67-219-(014)	11/10/10	1340	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-67-276-(014)	11/10/10	1416	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-67-323-(014)	11/10/10		N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-67-340-(014)	11/10/10	1353	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-67-39-(015)	11/10/10	1149	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly

Comments: Note: extra sample is required for sample specific QC

TAT Requested: Normal: ✓ Rush: _____ Specify: _____ (Subject to Surcharge)

Fax Results: Yes / (No)

Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone: (Eastern) Central Mountain Pacific Other _____

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1 [signature]	11/10/10	1545	1 SEALED STORAGE	11/10/10	1545
2			2		
3			3		

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT

Method of Shipment: FEDEX Date Shipped:

Airbill #:

Airbill #:

For Lab Receiving Use Only

Custody Seal Intact? YES NO

Cooler Temp: _____ C

1) Chain of Custody Number = Client Determined

2) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite

3) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field Filtered or - N - for sample was not field filtered.

4) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal

5) Sample Analysis Requested: Analytical method requested (i.e. *8260B, 6010B/7470A*) and number of containers provided for each (i.e. *8260B - 3, 6010B/7470A - 1*).

6) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00266353

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number (1):
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy Phone #: (914) 736-8405

Project/Site Name: Indian Point Energy Center Fax #: (914) 734-6247

Address: 450 Broadway, Suite 3, Buchanan, NY 10511

Collected by: CB, MB Send Results To: Patrick Donahue

Sample Analysis Requested (5) (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Should this sample be considered: Radioactive	Should this sample be considered: TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)							<-- Preservative Type (6)
MW-58-26-(011)	11/11/10	1512	N	N	GW	Y	N	1	1	1	1							2 Liter Poly
MW-58-65-(011)	11/11/10	1353	N	N	GW	Y	N	1	1	1	1							2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

TAT Requested: Normal: ✓ Rush: _____ Specify _____ (Subject to Surcharges)

Fax Results: Yes / (No)

Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone
(Eastern) Pacific
Central Other _____
Mountain

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	11/12/10	1600	1 SECURED STORAGE	11/12/10	1600
2			2		
3			3		

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX Date Shipped:
Airbill #:
Airbill #:

1.) Chain of Custody Number = Client Determined

2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite

3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered

4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal

5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1).

6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate. If no preservative is added = leave field blank

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp: C

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00266354

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number (1):
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy Phone #: (914) 736-8405

Project/Site Name: Indian Point Energy Center Fax #: (914) 734-6247

Address: 450 Broadway, Suite 3, Buchanan, NY 10511

Collected by: CB, MS Send Results To: Patrick Donahue

Sample Analysis Requested (5) (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Should this sample be considered: Radioactive	Should this sample be considered: TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)	Nickel 63 (Ni63)	<-- Preservative Type (6)	Comments
MW-49-26-(022)	11/11/10	1423	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-49-42-(022)	11/11/10	1413	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-49-65-(022)	11/11/10	1418	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly

Comments: Note: extra sample is required for sample specific QC

TAT Requested: Normal: ✓ Rush: _____ Specify: _____ (Subject to Surcharge) Fax Results: Yes / (No)

Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone: (Eastern) Pacific Central Other _____ Mountain

Chain of Custody Signatures

	Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	[signature]	11/12/10	1600	[signature] STANLEY STORAGE	11/12/10	1600
2				2		
3				3		

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT

Method of Shipment: FEDEX Date Shipped:

Airbill #:

Airbill #:

1.) Chain of Custody Number = Client Determined

2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite

3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered

4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal

5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1)

6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

For Lab Receiving Use Only

Custody Seal Intact? YES NO

Cooler Temp: _____ C

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00266355

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number (1):
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy — Phone #: (914) 736-8405
Project/Site Name: Indian Point Energy Center — Fax #: (914) 734-6247
Address: 450 Broadway, Suite 3, Buchanan, NY 10511
Collected by: CP — Send Results To: Patrick Donahue

Sample Analysis Requested (5) (Fill in the number of containers for each test)

Sample ID (* For composites indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Should this sample be considered: Radioactive	Should this sample be considered: TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)	Nickel 63 (Ni63)	<-- Preservative Type (6)
MW 50-42-(023)	11/12/10	1210	N	N	GW	Y	N	1	1	1	1	1	2 Liter Poly
MW-50-66-(028)	11/12/10	1230	N	N	GW	Y	N	1	1	1	1	1	2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

TAT Requested: Normal: ✓ Rush: ____ Specify: ____ (Subject to Surcharge)
Fax Results: Yes / (No)
Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone
(Eastern) Pacific
Central Other ____
Mountain

Chain of Custody Signatures

	Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	[signature]	11/12/10	1600	SEALED STORAGE	11/12/10	1600
2						
3						

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX — Date Shipped:
Airbill #:
Airbill #:

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp: ____ C

1) Chain of Custody Number = Client Determined
2) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered
4) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal
5) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B 3, 6010B/7470A 1).
6) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00266356

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number (1):
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy Phone #: (914) 736-8405

Project/Site Name: Indian Point Energy Center Fax #: (914) 734-6247

Address: 450 Broadway, Suite 3, Buchanan, NY 10511

Collected by: CB, MB Send Results To: Patrick Donahue

Sample Analysis Requested (5) (Fill in the number of containers for each test)

Sample ID * For composites - indicate start and stop date/time	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Should this sample be considered: Radioactive	Should this sample be considered: TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)	<-- Preservative Type (6)	Comments
MW-56-53-(009)	11/15/10	1248	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-56-83-(011)	11/15/10	1437	N	N	GW	Y	N	1	1	1	1		2 Liter Poly

Comments: Note: extra sample is required for sample specific QC

TAT Requested: Normal: ✓ Rush: _____ Specify: _____ (Subject to Surcharge)

Fax Results: Yes / (No)

Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone: (Eastern) Central Mountain Pacific Other _____

Chain of Custody Signatures

	Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	[signature]	11/19/10	0800	1 SECURED STORAGE	11/19/10	0800
2				2		
3				3		

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT

Method of Shipment: FEDEX Date Shipped:

Airbill #:

Airbill #:

For Lab Receiving Use Only

Custody Seal Intact? YES NO

Cooler Temp: _____ C

1.) Chain of Custody Number = Client Determined

2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite

3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered

4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal

5.) Sample Analysis Requested: Analytical method requested (i.e. *8260B, 6010B/7470A*) and number of containers provided for each (i.e. *8260B - 3, 6010B/7470A - 1*)

6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00266357

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy Phone #: (914) 736-8405

Project/Site Name: Indian Point Energy Center Fax #: (914) 734-6247

Address: 450 Broadway, Suite 3, Buchanan, NY 10511

Collected by: CB, MB Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID * For composites - indicate start and stop date/time	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive	Should this sample be considered: TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)								<= Preservative Type (6)	Comments
MW-39-102-(010)	11/15/10	1612	N	N	GW	Y	N	1	1	1	1								2 Liter Poly	Note: extra sample is required for sample specific QC
MW-39-124-(010)	11/15/10	1246	N	N	GW	Y	N	1	1	1	1								2 Liter Poly	
MW-39-183-(010)	11/15/10	1253	N	N	GW	Y	N	1	1	1	1								2 Liter Poly	
MW-39-195 (010)	11/15/10	1325	N	N	GW	Y	N	1	1	1	1								2 Liter Poly	
MW-39-67-(010)	11/15/10	1628	N	N	GW	Y	N	1	1	1	1								2 Liter Poly	
MW-39-84-(010)	11/15/10	1638	N	N	GW	Y	N	1	1	1	1								2 Liter Poly	

TAT Requested: Normal: ✓ Rush: ____ Specify: ____ (Subject to Surcharge)

Fax Results: Yes / (No)

Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone
(Eastern) Pacific
Central Other ____
Mountain

Chain of Custody Signatures

	Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	[signature]	11/15/10	1700	1 SECURED STORAGE	11/15/10	1700
2				2		
3				3		

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX Date Shipped:
Airbill #:
Airbill #:

1 - Chain of Custody Number = Client Determined

2 - QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite

3 - Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered

4 - Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal

5 - Sample Analysis Requested: Analytical method requested (i.e. *8260B - 3, 6010B/7470A - 1*) and number of containers provided for each (i.e. *8260B - 3, 6010B/7470A - 1*)

6 - Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp: ____ C

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00266358

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number (1):
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy Phone #: (914) 736-8405

Project/Site Name: Indian Point Energy Center Fax #: (914) 734-6247

Address: 450 Broadway, Suite 3, Buchanan, NY 10511

Collected by: MB Send Results To: Patrick Donahue

Sample Analysis Requested (5) (Fill in the number of containers for each test)

Sample ID * For composites - indicate start and stop date/time	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Should this sample be considered: Radioactive	Should this sample be considered: TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)							<-- Preservative Type (6)
B-1-(010)	11/17/10	1110	N	N	GW	Y	N	1	1	1	1							2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

TAT Requested: Normal: ✓ Rush: _____ Specify: _____ (Subject to Surcharge)

Fax Results: Yes / (No)

Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone
(Eastern) Pacific
Central Other _____
Mountain

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	11/17/10	1539	SECURED STORAGE	11/17/10	1539
2			2		
3			3		

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX Date Shipped:
Airbill #:
Airbill #:

1.) Chain of Custody Number = Client Determined

2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite

3.) Field Filtered: For liquid matrices, indicate with a "Y" for yes the sample was field filtered or "N" for sample was not field filtered

4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc. Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Feval, N=Nasal

5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1).

6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate. If no preservative is added = leave field blank

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp: _____ C

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00266359

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy Phone #: (914) 736-8405

Project/Site Name: Indian Point Energy Center Fax #: (914) 734-6247

Address: 450 Broadway, Suite 3, Buchanan, NY 10511

Collected by: M.B. Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive	Should this sample be considered: TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)	< Preservative Type (6)	Comments
I-2-(002)	11/17/10	1425	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	Note: extra sample is required for sample specific QC

TAT Requested: Normal: ✓ Rush: _____ Specify: _____ (Subject to Surcharge)

Fax Results: Yes / (No)

Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone
(Eastern) Pacific
Central Other _____
Mountain

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	11/17/10	1540	1 SECURED STORAGE	11/17/10	1540
2			2		
3			3		

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX Date Shipped:
Airbill #:
Airbill #:

1.) Chain of Custody Number = Client Determined
2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered
4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal
5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B 3, 6010B/7470A 1)
6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

For Lab Receiving Use Only
Custody Seal Intact? *YES* *NO*
Cooler Temp: _____ C

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00266360

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy — Phone #: (914) 736-8405
Project/Site Name: Indian Point Energy Center — Fax #: (914) 734-6247
Address: 450 Broadway, Suite 3, Buchanan, NY 10511
Collected by: CB, MB — Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID * For composites - indicate start and stop date/time	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive	Should this sample be considered: TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)	Nickel 63 (Ni63)	<-- Preservative Type (6)	Comments
MW-60-35-(015)	11/18/10	1325	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-60-35-(015)-B	11/18/10	1325	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-60-35-(015)-D	11/18/10	1325	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-60-35-(015)-S	11/18/10	1325	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-60-53-(015)	11/18/10	1222	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-60-72-(015)	11/16/10	1317	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-60-135-(015)	11/16/10	1322	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-60-154-(015)	11/16/10	1340	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-60-176-(015)	11/16/10	1406	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly

TAT Requested: Normal: ✓ Rush: _____ Specify: _____ (Subject to Surcharge)
Fax Results: Yes / (No)
Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone
(Eastern) Pacific
Central Other _____
Mountain

Chain of Custody Signatures

	Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	[signature]	11/19/10	0805	SECURED STORAGE	11/19/10	0805
2						
3						

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX — Date Shipped:
Airbill #:
Airbill #:

1.) Chain of Custody Number = Client Determined
2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered
4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal
5.) Sample Analysis Requested: Analytical method requested (i.e. *8260B, 6010B/7470A*) and number of containers provided for each (i.e. *8260B - 3, 6010B/7470A - 1*).
6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp: _____ C

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00266361

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy Phone #: (914) 736-8405

Project/Site Name: Indian Point Energy Center Fax #: (914) 734-6247

Address: 450 Broadway, Suite 3, Buchanan, NY 10511

Collected by: Miguel Britos Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID * For composites - indicate start and stop date/time	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive	Should this sample be considered: TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)	Nickel 63 (Ni63)							<-- Preservative Type (6)
LAF-002-(014)	11/22/10	1441	N	N	GW	Y	N	1	1	1	1	1							2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

TAT Requested: Normal: ✓ Rush: ____ Specify: ____ (Subject to Surcharge)

Fax Results: Yes / (No)

Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone
(Eastern) Central Mountain Pacific Other ____

Chain of Custody Signatures

	Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	[signature]	11/24/10	0905	SECURED STORAGE	11/24/10	0905
2						
3						

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX Date Shipped:
Airbill #:
Airbill #:

1) Chain of Custody Number = Client Determined
2) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered.
4) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal
5.) Sample Analysis Requested: Analytical method requested (i.e. *8260B - 3, 6010B/7470A - 1*).
6) Preservative Type: HA = Hydrochloric Acic, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp. ____ C

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00266362

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy Phone #: (914) 736-8405

Project/Site Name: Indian Point Energy Center Fax #: (914) 734-6247

Address: 450 Broadway, Suite 3, Buchanan, NY 10511

Collected by: Miguel Britos Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive	Should this sample be considered: TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)	Nickel 63 (Ni63)	< Preservative Type (6)	Comments
LAF-002-(014)	11/22/10	1441	N	N	GW	Y	N	1	1	1	1	1	2 Liter Poly	Note: extra sample is required for sample specific QC

TAT Requested. Normal: ✓ Rush: _____ Specify: _____ (Subject to Surcharge) Fax Results: Yes / (No) Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone
(Eastern) Pacific
Central Other _____
Mountain

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1 Miguel Britos	11/24/10	0905	1 SECURED STORAGE	11/24/10	0905
2			2		
3			3		

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX Date Shipped:
Airbill #:
Airbill #:

1.) Chain of Custody Number = Client Determined
2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered.
4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal
5.) Sample Analysis Requested: Analytical method requested (i.e. *8260B, 6010B/7470A*) and number of containers provided for each (i.e. *8260B - 3, 6010B/7470A - 1*)
6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp: _____ C

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00266363

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy Phone #: (914) 736-8405

Project/Site Name: Indian Point Energy Center Fax #: (914) 734-6247

Address: 450 Broadway, Suite 3, Buchanan, NY 10511

Collected by: Miguel Britos Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID * For composites - indicate start and stop date/time	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive	Should this sample be considered: TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)	Nickel 63 (Ni63)	<-- Preservative Type (6)	Comments
MW-54-123-(015)	11/23/10	1512	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-54-144-(015)	11/23/10	1230	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-54-173-(015)	11/23/10	1225	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-54-190-(015)	11/23/10	1222	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-54-37-(015)	11/23/10	1447	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly
MW-54-58-(015)	11/23/10	1455	N	N	GW	Y	N	1	1	1	1	1		2 Liter Poly

Note: extra sample is required for sample specific QC

TAT Requested: Normal: ✓ Rush: ____ Specify: ____ (Subject to Surcharge)

Fax Results: Yes / (No)

Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone
(Eastern) Central Mountain Pacific Other ____

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (Signed)	Date	Time
Miguel A Britos	11/24/10	0900	SECURED STORAGE	11/24/10	0900
2			2		
3			3		

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX Date Shipped:
Airbill #:
Airbill #:

1.) Chain of Custody Number = Client Determined

2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite

3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered.

4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, F=Wipe, U=Urine, F=Fecal, N=Nasal

5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1).

6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp: ____ C

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00266364

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy Phone #: (914) 736-8405

Project/Site Name: Indian Point Energy Center Fax #: (914) 734-6247

Address: 450 Broadway, Suite 3, Buchanan, NY 10511

Collected by: Miguel Britos Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID * For composites - indicate start and stop date/time	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive	Should this sample be considered: TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr-90)	<-- Preservative Type (6)	Comments
MW-40-100-(016)	11/29/10	1212	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-40-127-(016)	11/29/10	1226	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-40-162-(014)	11/29/10	1245	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-40-27-(013)	11/29/10	1523	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-40-46-(014)	11/29/10	1636	N	N	GW	Y	N	1	1	1	1		2 Liter Poly
MW-40-81-(014)	11/29/10	1203	N	N	GW	Y	N	1	1	1	1		2 Liter Poly

Comments: Note: extra sample is required for sample specific QC

TAT Requested: Normal: ✓ Rush: _____ Specify: _____ (Subject to Surcharge) Fax Results: Yes / (No)

Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone
(Eastern) Pacific
Central Other _____
Mountain

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	12/01/10	1135	1 SECURED STORAGE	12/01/10	1135
2			2		
3			3		

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX Date Shipped:
Airbill #:
Airbill #:

1) Chain of Custody Number = Client Determined
2) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered
4) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal
5) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1).
6) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate. If no preservative is added = leave field blank

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp: _____ C

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00266365

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number (1):
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy Phone #: (914) 736-8405
Project/Site Name: Indian Point Energy Center Fax #: (914) 734-6247
Address: 450 Broadway, Suite 3, Buchanan, NY 10511
Collected by: Miguel Britos Send Results To: Patrick Donahue

Sample Analysis Requested (5) (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Should this sample be considered: Radioactive	Should this sample be considered: TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr-90)	<-- Preservative Type (6)	Comments
MW-51-104-(015)	11/30/10	0955	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	Note: extra sample is required for sample specific QC
MW-51-135-(015)	11/30/10	0957	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	
MW-51-163-(015)	11/30/10	1002	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	
MW-51-189-(015)	11/30/10	0956	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	
MW-51-40-(017)	11/30/10	1254	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	
MW-51-79-(017)	11/30/10	1308	N	N	GW	Y	N	1	1	1	1	2 Liter Poly	

TAT Requested: Normal: ✓ Rush: _____ Specify: _____ (Subject to Surcharge) Fax Results: Yes / (No)

Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone: (Eastern) Central Mountain Pacific Other _____

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1 [signature]	12/01/10	1130	SECURED STORAGE	12/01/10	1130
2			2		
3			3		

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX Date Shipped:
Airbill #:
Airbill #:

1.) Chain of Custody Number = Client Determined
2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
3.) Field Filtered: For liquid matrices, indicate with a "Y" for yes the sample was field filtered or "N" for sample was not field filtered.
4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal
5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1)
6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

For Lab Receiving Use Only
Custody Seal Intact? YES NO
Cooler Temp: _____ C

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

IPEC00266366

Page: 1 of 1
Project #: Entergy GW Mon Prog
GEL Quote #:
COC Number [1]:
PO Number: 50013510

GEL Chain of Custody and Analytical Request

See www.gel.com for GEL's Sample Acceptance SOP

GEL Work Order Number:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Entergy Phone #: (914) 736-8405

Project/Site Name: Indian Point Energy Center Fax #: (914) 734-6247

Address: 450 Broadway, Suite 3, Buchanan, NY 10511

Collected by: Miguel Britos Send Results To: Patrick Donahue

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID * For composites - indicate start and stop date/time	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive	Should this sample be considered: TSCA Regulated	Total number of containers	Tritium (H3)	Gamma Spec (GS)	Strontium 90 (Sr90)	<-- Preservative Type (6)
MH-5-(013)	11/24/10	1110	N	N	GW	Y	N	1	1	1	1	2 Liter Poly

Comments
Note: extra sample is required for sample specific QC

TAT Requested: Normal: ✓ Rush: _____ Specify: _____ (Subject to Surcharge)

Fax Results: Yes / (No)

Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Sample Collection Time Zone
(Eastern) Pacific
Central Other _____
Mountain

Chain of Custody Signatures

	Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	[signature]	10/24/10	1200	SECURED STORAGE	10/24/10	1200
2						
3						

Sample Shipping and Delivery Details

GEL PM: ERIN TRENT
Method of Shipment: FEDEX Date Shipped:
Airbill #:
Airbill #:

1.) Chain of Custody Number – Client Determined

2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite

3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered.

4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal

5.) Sample Analysis Requested: Analytical method requested (i.e. *8260B, 6010B/7470A*) and number of containers provided for each (i.e. *8260B - 3, 6010B/7470A - 1*).

6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate. If no preservative is added = leave field blank

For Lab Receiving Use Only
Custody Seal Intact? *YES* *NO*
Cooler Temp: _____ C

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT

APPENDIX D: 4TH QUARTER 2010 SAMPLING DATA SHEETS

WELL ID: MW 51 - 189

SAMPLE ID: 015

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy 50°

PROJECT NO: 01.0017869.92
DATE: 11/30/10
SAMPLER(S): M. BRITOS

SAMPLING INTERVAL (depth in ft below top of casing)

184.2 to 197.8

SAMPLING PORT

189

TOTAL VOLUME PURGED: 1.45 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
819	0	PUMP ON						5.6/5.6	42
829	0.1	11.95	1.505	1.97	6.67	-115.7	—		↓
837	0.25	12.00	1.515	1.20	6.63	-126.0	—		
845	0.45	12.21	1.520	0.82	6.60	-153.1	2.53		44
854	0.65	12.29	1.520	0.70	6.60	-176.2	1.09		
902	0.85	12.33	1.522	0.50	6.60	-219.0	1.00		
909	1.0	12.31	1.522	0.44	6.60	-232.2	0.54		
914	1.1	12.26	1.522	0.41	6.60	-246.1	0.51		
923	1.2	12.23	1.522	0.38	6.59	-250.9	0.57		
928	1.3	12.21	1.518	0.40	6.59	-244.6	0.61	↓	↓
929		PUMP OFF							
930		START SAMPLE COLLECTION							
936		SAMPLE COMPLETED : 2 L IPEC							
956		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	20070429 3

NOTES AND OBSERVATIONS:

WELL ID: MW 51-163

SAMPLE ID: 015

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy 50°

PROJECT NO: 01.0017869.92
DATE: 11/30/10
SAMPLER(S): M. BRITOS

SAMPLING INTERVAL (depth in ft below top of casing)

154.7 to 164.2

SAMPLING PORT

163 2

TOTAL VOLUME PURGED: 0.85 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
819	0	PUMP ON						5.6/5.6	42
829	0.05	11.47	2.089	0.57	6.49	-116.4	—		↓
837	0.12	11.49	2.090	0.42	6.56	-112.5	—		
845	0.30	11.65	2.103	0.27	6.67	-98.6	2.36		44
854	0.40	11.74	2.111	0.23	6.71	-94.3	1.37		
902	0.50	11.79	2.118	0.20	6.75	-80.1	0.80		
909	0.60	11.82	2.120	0.20	6.76	-80.8	0.76		
914	0.70	11.81	2.123	0.19	6.77	-78.9	0.74	↓	↓
915		PUMP OFF							
917		START SAMPLE COLLECTION							
1002		SAMPLE COMPLETED: 2 L IPEC							
1002		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070429 3

NOTES AND OBSERVATIONS:

WELL ID: MW 5L - 135

SAMPLE ID: 015

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy 50°

PROJECT NO: 01.0017869.92
DATE: 11/30/10
SAMPLER(S): M. BRITOS

SAMPLING INTERVAL (depth in ft below top of casing)

130.2 to 143.7

SAMPLING PORT

135 3

TOTAL VOLUME PURGED: 1.75 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
819	0	PUMP ON						5.6/5.6	42
829	0.1	12.10	2.397	1.49	6.62	-111.4	—	↓	↓
837	0.3	12.28	2.428	0.89	6.72	-77.2	—		
845	0.55	12.39	2.444	0.61	6.81	-24.7	0.67		44
854	0.75	12.39	2.445	0.55	6.83	-4.9	0.58		↓
902	1.0	12.43	2.444	0.49	6.83	+17.8	0.49		
909	1.2	12.44	2.443	0.46	6.83	23.8	0.59		
914	1.3	12.45	2.444	0.43	6.83	27.6	0.64		
923	1.4	12.44	2.436	0.43	6.82	28.5	0.67		
928	1.6	12.43	2.439	0.42	6.82	27.7	0.70	↓	↓
929		PUMP OFF							
930		START SAMPLE COLLECTION							
957		SAMPLE COMPLETED : 2 L IPEC							
957		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
Turbidity meter	20070429 3

NOTES AND OBSERVATIONS:

WELL ID: MW 5L - 104

SAMPLE ID: 015

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy 50°

PROJECT NO: 01.0017869.92
DATE: 11/30/10
SAMPLER(S): M. BRITOS

SAMPLING INTERVAL (depth in ft below top of casing)

130.2 to 143.7

SAMPLING PORT

104 4

TOTAL VOLUME PURGED: 3.65 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
819	0	PUMP ON						5.6/5.6	42
829	0.1	12.51	2.672	2.40	6.96	57.7	—		
837	0.4	12.67	2.669	1.81	7.05	43.6	—		
845	1.0	12.69	2.680	1.67	7.06	28.4	0.00		44
854	1.4	12.64	2.679	1.58	7.06	19.3	0.01		
902	1.8	12.66	2.678	1.55	7.06	11.2	0.00		
909	2.1	12.64	2.681	1.50	7.06	9.1	0.0		
914	2.3	12.61	2.682	1.48	7.06	7.0	0.0		
923	2.5	12.62	2.678	1.47	7.05	6.5	0.0		
928	2.9	12.63	2.684	1.44	7.05	1.1	0.0		
937	3.3	12.64	2.687	1.46	7.06	0.7	0.0		
942	3.5	12.64	2.688	1.49	7.06	0.1	0.0		
943		PUMP OFF							
943		START SAMPLE COLLECTION							
955		SAMPLE COMPLETED : 2 L IPEC							
955		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070429 3

NOTES AND OBSERVATIONS:

WELL ID: MW 51-79

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy 50°

PROJECT NO: 01.0017869.92
DATE: 11/30/10
SAMPLER(S): Miguel Brutos

SAMPLING INTERVAL (depth in ft below top of casing)

63.2 to 81.2

SAMPLING PORT

79 6

TOTAL VOLUME PURGED: 1.55 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1120	0	PUMP ON						6.5/8.4	2.4
1130	0.01	12.32	2.622	2.12	6.64	-83.4	—		
1135	0.08	12.29	2.619	1.80	6.58	-75.0	6.17		
1142	0.15	12.52	2.625	1.74	6.57	-59.8	6.04		
1149	0.30	12.63	2.621	1.74	6.57	-30.8	5.26		
1155	0.45	12.66	2.620	1.78	6.58	-16.1	6.49		
1200	0.55	12.71	2.618	1.75	6.58	+1.1	4.38		
1206	0.75	12.73	2.618	1.75	6.58	+7.2	6.15		
1214	0.95	12.76	2.616	1.81	6.58	19.3	590		
1219	1.05	12.77	2.616	1.73	6.58	26.5	5.79		
1229	1.20	12.74	2.614	1.70	6.58	33.9	5.83		
1234	1.30	12.74	2.614	1.68	6.58	35.1	5.76		
1239	1.40	12.73	2.613	1.65	6.58	36.0	5.80		
1240		PUMP OFF							
1241		START SAMPLE COLLECTION							
1308		SAMPLE COMPLETED; 2 L IPEC							
1308		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	20070 4293

NOTES AND OBSERVATIONS:

WELL ID: MW 5L - 40

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy 50°

PROJECT NO: 01.0017869.92
DATE: 11/30/10
SAMPLER(S): Miguel Britos

SAMPLING INTERVAL (depth in ft below top of casing)

29.7 to 44.2

SAMPLING PORT

40 7

TOTAL VOLUME PURGED: 2.45 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1120	0	PUMP ON						6.5/8.4	24
1130	0.05	12.61	2.624	4.20	6.83	-84.9	—		
1135	0.15	12.75	2.574	4.52	6.81	-71.6	0.01		
1142	0.30	13.00	2.547	5.00	6.81	-48.4	0.02		
1149	0.65	13.01	2.540	5.07	6.81	-17.1	0.03		
1155	0.80	13.03	2.539	5.00	6.80	-3.2	0.0		
1200	1.0	13.07	2.539	5.12	6.80	+5.9	0.0		
1206	1.2	13.08	2.540	5.14	6.79	+9.5	0.0		
1214	1.45	13.10	2.540	5.22	6.79	29.1	0.0		
1219	1.80	13.13	2.541	5.24	6.78	36.2	0.0		
1229	2.05	13.10	2.541	5.29	6.78	43.4	0.0		
1234	2.15	13.11	2.542	5.32	6.78	44.7	0.0		
1239	2.30	13.11	2.542	5.33	6.78	45.3	0.0		
1240		PUMP OFF							
1241		START SAMPLE COLLECTION							
1254		SAMPLE COMPLETED : 2 L IPEC							
1254		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	200704293

NOTES AND OBSERVATIONS:

WELL ID: MW 40.162

SAMPLE ID: 014

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 40's

PROJECT NO: 01.0017869.92
DATE: 11/29/10
SAMPLER(S): M.B

SAMPLING INTERVAL (depth in ft below top of casing)

158.7 to 190.3

SAMPLING PORT

162

TOTAL VOLUME PURGED: 0.60 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1040	0	PUMP ON						6/9	44
1050	0.01	12.40	1.280	2.60	6.04	-127.7	—		
1100	0.10	11.70	1.261	0.86	5.98	-117.5	—		
1110	0.20	11.97	1.254	0.66	5.92	-106.6	1.01		
1118	0.25	12.08	1.253	0.54	5.92	-102.5	0.82		
1124	0.30	12.10	1.253	0.49	6.09	-99.3	0.77		
1133	0.35	12.10	1.254	0.48	6.17	-94.5	0.39		
1139	0.40	12.12	1.255	0.48	6.19	-93.9	0.36		
1146	0.45	12.13	1.254	0.50	6.22	-91.4	0.34	↓	↓
1147		PUMP OFF							
1148		START SAMPLE COLLECTION							
1245		SAMPLE COMPLETED: 2 L IPEC							
1245		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070429 3

NOTES AND OBSERVATIONS:

WELL ID: MW 40 - 127

SAMPLE ID: 016

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 40's

PROJECT NO: 01.0017869.92
DATE: 11/29/10
SAMPLER(S): M.B

SAMPLING INTERVAL (depth in ft below top of casing)

125.2 to 136.7

SAMPLING PORT

127 2

TOTAL VOLUME PURGED: 1.50 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1040	0	PUMP ON						6/9	44
1050	0.05	13.83	2.174	2.28	6.58	-105.9	—	↓	↓
1100	0.30	13.89	2.189	0.92	6.81	-122.6	—		
1110	0.55	14.28	2.195	0.60	7.00	-134.1	2.85		
1118	0.75	14.03	2.199	0.47	7.05	-137.7	2.73		
1124	0.85	13.93	2.200	0.49	7.07	-140.4	1.37		
1133	0.95	13.89	2.206	0.45	7.08	-143.6	0.60		
1139	1.05	13.85	2.205	0.41	7.08	-145.1	0.57		
1146	1.15	13.98	2.207	0.41	7.09	-147.9	0.43		
1156	1.30	14.03	2.205	0.41	7.08	-150.0	0.47		
1201	1.35	13.96	2.207	0.40	7.09	-151.9	0.44	↓	↓
1202		PUMP OFF							
1203		START SAMPLE COLLECTION							
1226		SAMPLE COMPLETED : 2 L IPEC							
1226		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070429 3

NOTES AND OBSERVATIONS:

WELL ID: MW 40-100

SAMPLE ID: 016

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 40's

PROJECT NO: 01.0017869.92
DATE: 11/29/10
SAMPLER(S): MB

SAMPLING INTERVAL (depth in ft below top of casing)

93.2 to 106.7

SAMPLING PORT

100 3

TOTAL VOLUME PURGED: 3.05 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1040	0	PUMP ON						6/9	44
1050	0.1	14.29	2.776	2.45	6.18	-74.6	—		
1100	0.4	14.45	2.704	0.54	6.45	-79.8	—		
1110	0.9	14.53	2.687	0.40	6.60	-51.5	16.70		
1118	1.2	14.40	2.678	0.46	6.64	-40.1	15.98		
1124	1.5	14.34	2.674	0.49	6.6	-32.9	14.87		
1133	1.8	14.30	2.666	0.56	6.69	-23.2	16.38		
1139	2.0	14.24	2.665	0.57	6.70	-19.1	17.08		
1146	2.5	14.23	2.660	0.59	6.70	-17.6	17.45		
1156	2.9	14.21	2.656	0.60	6.69	-16.8	16.96		
1157		PUMP OFF							
1158		START SAMPLE COLLECTION							
1212		SAMPLE COMPLETED: 2 L IPEC							
1212		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070429 3

NOTES AND OBSERVATIONS:

WELL ID: MW 40.81

SAMPLE ID: 014

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 40's

PROJECT NO: 01.0017869.92
DATE: 11/29/10
SAMPLER(S): MB

SAMPLING INTERVAL (depth in ft below top of casing)

64.7 to 84.2

SAMPLING PORT

81 4

TOTAL VOLUME PURGED: 3.05 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1040	0	PUMP ON						6/9	44
1050	0.1	15.11	5.370	5.07	6.13	-17.9	—		
1100	0.5	14.98	4.971	2.68	6.21	-14.5	—		
1110	1.1	14.83	4.927	2.26	6.29	-9.7	0.58		
1118	1.4	14.74	4.904	2.19	6.30	-7.0	0.51		
1124	1.7	14.62	4.882	2.12	6.31	-3.0	0.60		
1133	2.3	14.54	4.900	2.10	6.30	-2.4	0.61		
1139	2.5	14.56	4.897	2.07	6.30	-2.1	0.64		
1146	2.9	14.58	4.905	2.05	6.31	-2.8	0.60		
1147		PUMP OFF, START SAMPLE COLLECTION							
1203		SAMPLE COMPLETED : 2 4 IPEC							
1203		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	20070429 3

NOTES AND OBSERVATIONS:

WELL ID: MW 40.46

SAMPLE ID: 014

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 40's

PROJECT NO: 01.0017869.92
DATE: 11/29/10
SAMPLER(S): MB

SAMPLING INTERVAL (depth in ft below top of casing)

44.2 to 53.7

SAMPLING PORT

46 5

TOTAL VOLUME PURGED: 0.55 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1339	0	PUMP ON						5/9	20
1348	0.05	14.19	5.522	0.81	6.56	-48.3	-	5/9	18
1353	0.10	14.10	5.527	0.52	6.50	-55.8	0.76		
1358	0.12	13.68	5.565	0.44	6.50	-56.6	0.74		
1406	0.16	12.96	5.549	0.36	6.54	-45.8	0.79		
1414	0.20	12.34	5.534	0.27	6.57	-34.5	0.82		
1424	0.25	12.49	5.537	0.22	6.60	-26.7	1.19		
1434	0.30	12.52	5.547	0.22	6.62	-14.0	1.32		
1444	0.35	12.45	5.556	0.20	6.62	-11.3	1.22		
1450	0.38	12.48	5.555	0.19	6.62	-10.8	1.25		
1455	0.40	12.51	5.555	0.19	6.62	-9.9	1.22		
1456		PUMP OFF							
1457		START SAMPLE COLLECTION							
1636		SAMPLE COMPLETED : 2 L IPEC							
1636		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070429 3

NOTES AND OBSERVATIONS:

WELL ID: MW 40-27

SAMPLE ID: 013

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 40's

PROJECT NO: 01.0017869.92
DATE: 11/29/10
SAMPLER(S): M.B

SAMPLING INTERVAL (depth in ft below top of casing)

18.2 to 35.2

SAMPLING PORT

27 6

TOTAL VOLUME PURGED: 1.50 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1339	0	PUMP ON						5/9	20
1348	0.01	14.56	4.360	7.48	6.69	-54.7	—	5/9	18
1353	0.05	14.33	4.472	6.11	6.44	-14.1	3.56		
1358	0.10	14.33	4.462	5.40	6.36	+6.9	3.88		
1406	0.25	14.27	4.449	4.98	6.40	30.4	3.49		
1414	0.45	14.20	4.435	4.77	6.44	53.6	2.98		
1424	0.60	14.49	4.445	4.80	6.49	64.4	0.58		
1434	0.95	14.60	4.459	4.51	6.51	74.9	0.45		
1444	1.15	14.57	4.467	4.48	6.52	76.2	0.51		
1450	1.25	14.62	4.468	4.52	6.53	77.6	0.49		
1455	1.35	14.64	4.471	4.49	6.54	78.2	0.52	↓	↓
1456		PUMP OFF							
1457		START SAMPLE COLLECTION							
1523		SAMPLE COMPLETED : 2 L IPEC							
1523		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
Turbidity meter	20070429 3

NOTES AND OBSERVATIONS:

WELL ID: MW-54-190

SAMPLE ID: 015

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy 50's

PROJECT NO: 01.0017869.92
DATE: 11/23/10
SAMPLER(S): M.B

SAMPLING INTERVAL (depth in ft below top of casing)

185.0 to 203.6

SAMPLING PORT

190

TOTAL VOLUME PURGED: 2.10 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressur (psi)
1059	0	PUMP ON						7.5/6.7	35
1109	0.05	21.23	2.084	1.69	5.85	-1.4	—		36
1119	0.15	21.48	2.077	0.36	5.99	-39.1	1.82		
1129	0.35	21.50	2.074	0.22	6.35	-35.6	0.05		
1139	0.70	21.12	2.072	0.09	6.72	-6.5	0.00		
1147	1.15	21.09	2.071	0.10	6.79	+1.9	0.0		
1153	1.45	21.06	2.071	0.10	6.83	+6.8	0.0		
1201	1.75	21.03	2.071	0.11	6.85	7.2	0.0		
1206	1.95	21.01	2.072	0.10	6.87	7.3	0.0	↓	↓
1207		PUMP OFF							
1208		START							
1222		SAMPLE COMPLETED			: 2	L IPEC			
1222		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070125 4

NOTES AND OBSERVATIONS:

WELL ID: MW-54-173

SAMPLE ID: 015

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy 50's

PROJECT NO: 01.0017869.92
DATE: 11/23/10
SAMPLER(S): MB

SAMPLING INTERVAL (depth in ft below top of casing)

170.5 to 182.0

SAMPLING PORT

173 2

TOTAL VOLUME PURGED: 2.65 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressur (psi)
1059	0	PUMP ON						7.5/6.7	35
1109	0.05	21.38	1.846	1.96	5.96	-116.6	0.90		36
1119	0.20	21.54	1.873	0.40	6.13	-118.0	0.21		
1129	0.50	21.33	1.877	0.30	6.42	-84.0	0.00		
1139	1.05	20.95	1.876	0.24	6.72	+19.9	0.00		
1147	1.35	20.90	1.876	0.24	6.79	+29.8	0.00		
1153	1.65	20.73	1.876	0.23	6.83	34.0	0.00		
1201	1.90	20.69	1.875	0.23	6.84	35.8	0.00		
1206	2.00	20.65	1.875	0.23	6.85	36.9	0.00		
1211	2.50	20.64	1.874	0.23	6.86	37.3	0.00		
1212		PUMP OFF							
1213		START SAMPLE COLLECTION							
1225		SAMPLE COMPLETED : 2 L IPEC							
1225		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	10070125 4

NOTES AND OBSERVATIONS:

WELL ID: MW-54-144

SAMPLE ID: 015

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy 50's

PROJECT NO: 01.0017869.92
DATE: 11/23/10
SAMPLER(S): MB

SAMPLING INTERVAL (depth in ft below top of casing)

135.0 to 155.5

SAMPLING PORT

144 3

TOTAL VOLUME PURGED: _____ gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressu (psi)
1059	0	PUMP ON						7.5/6.7	35
1109	0.05	21.40	2.013	1.58	6.30	-36.7	—		36
1119	0.25	21.63	1.970	0.53	6.95	-29.1	0.68		
1129	0.55	21.33	1.953	0.41	7.15	-12.5	0.11		
1139	1.30	20.92	1.957	0.34	7.23	+17.9	0.00		
1147	1.60	20.87	1.961	0.3	7.2	+29.8	0.00		
1153	2.00					39.5			
1201	2.50					46.9			
1206	2.70	20.63	1.968	0.30	7.26	48.7			
1211		20.62		0.29	7.26	49.8	0.00		
1216	3.25	20.60	1.968	0.30	7.27	50.4	0.00		
1217		PUMP OFF							
1218		START SAMPLE COLLECTION							
1230		SAMPLE COMPLETED : 2 L IPEC							
1230		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070 1254

NOTES AND OBSERVATIONS:

WELL ID: MW-54-123

SAMPLE ID: 015

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy 50's

PROJECT NO: 01.0017869.92
DATE: 11/23/10
SAMPLER(S): MB

SAMPLING INTERVAL (depth in ft below top of casing)

116.0 to 126.0

SAMPLING PORT

123 4

TOTAL VOLUME PURGED: 0.95 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressu (psi)
1345	0	PUMP ON						6/4	20
1353	0.05	22.02	1.882	1.19	6.16	-71.9	—		
1403	0.20	22.07	1.883	0.50	6.43	-85.3	0.13		
1411	0.30	21.96	1.887	0.34	6.70	-96.3	0.00		
1420	0.45	21.94	1.890	0.29	6.89	-101.6	0.00		
1429	0.70	21.90	1.891	0.27	6.93	-102.2	0.00		
1434	0.80	21.87	1.891	0.26	6.96	-103.8	0.00	↓	↓
1435		PUMP	OFF						
1436		START							
1512		SAMPLE COMPLETED : 2 L IPEC							
1512		PUMP	OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	200701254

NOTES AND OBSERVATIONS:

WELL ID: MW 54-58

SAMPLE ID: 015

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy 50's

PROJECT NO: 01.0017869.92
DATE: 11/23/10
SAMPLER(S): MB

SAMPLING INTERVAL (depth in ft below top of casing)

51.5 to 64.0

SAMPLING PORT

58

5

TOTAL VOLUME PURGED: 1.85 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressu (psi)
1345	0	PUMP ON						6/4	20
1353	0.05	21.90	1.743	1.37	6.37	-104.1	—		
1403	0.35	21.62	1.667	0.39	6.42	-95.7	0.0		
1411	0.60	21.51	1.664	0.33	6.54	-93.7	0.01		
1420	1.0	21.47	1.677	0.30	6.69	-89.8	0.0		
1429	1.3	21.42	1.693	0.31	6.73	-84.0	0.0		
1434	1.45	21.42	1.696	0.31	6.75	-82.2	0.0		
1439	1.70	21.41	1.702	0.32	6.78	-80.8	0.0	↓	↓
1440		PUMP OFF							
1441		START SAMPLE COLLECTION							
1455		SAMPLE COMPLETED : 2 L IPEC							
1455		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070 1254

NOTES AND OBSERVATIONS:

WELL ID: MW 54-37

SAMPLE ID: 015

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: cloudy 50's

PROJECT NO: 01.0017869.92
DATE: 11/23/10
SAMPLER(S): MB

SAMPLING INTERVAL (depth in ft below top of casing)

29.0 to 42.0

SAMPLING PORT

37

6

TOTAL VOLUME PURGED: 2.35 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressur (psi)
1345	0	PUMP ON						6/4	20
1353	0.05	21.86	1.898	6.60	7.00	-33.9	—		
1403	0.4	21.65	1.864	5.63	7.10	+23.6	1.14		
1411	0.8	21.58	1.864	5.58	7.12	33.1	1.05		
1420	1.5	21.55	1.865	5.09	7.13	39.2	1.19		
1429	2.0	21.53	1.867	5.06	7.14	40.7	1.23		
1434	2.2	21.51	1.868	5.02	7.14	41.5	1.25	↓	↓
1435		PUMP OFF							
1436		START SAMPLE							
1447		SAMPLE COMPLETED : 2 L IPEC							
1447		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20078 12524

NOTES AND OBSERVATIONS:

WELL ID: LAF-002
SAMPLE ID: 014

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sun + clouds 60°F

PROJECT NO: 01.0017869.92
DATE: 11/22/10
SAMPLER(S): M. B
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 74.40 Transducer Actual Depth —

Time	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Purged Notes H_2O (gal)
1040	74.40		PUMP	ON				5/28	48	
1050	74.45							5/30	48	0
1055	74.50	13.87	1.334	8.96	6.49	234.2	—	↓	↓	0.01
1101	74.55	13.89	2.534	5.64	6.21	230.6	2.26	↓	↓	0.20
1117	74.60	13.62	2.514	1.96	6.26	42.1	0.56	5/43	40	
1130	74.60	14.63	2.497	1.67	6.30	38.1	0.78	5/30	40	0.25
1136	74.61	15.01	2.500	1.65	6.31	37.5	0.72	↓	↓	
1141	74.62	15.30	2.497	1.58	6.31	38.1	0.79	↓	↓	
1146	74.62	15.59	2.494	1.56	6.32	32.1	0.78	↓	↓	0.30
1151	74.61	15.61	2.491	1.53	6.32	31.7	0.80	↓	↓	0.32
1156	74.61	15.64	2.491	1.54	6.32	33.0	0.77	↓	↓	
1157		START SAMPLE COLLECTION								
1441		SAMPLE COMPLETED: 2 L IPEC								
1441		PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070 1254

NOTES AND OBSERVATIONS: Total volume purged 0.45 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: I-2
SAMPLE ID: 002

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Showers, cloudy, windy 60's

PROJECT NO: 01.0017869.92
DATE: 11/17/10
SAMPLER(S): M B
PUMP DEPTH: 38.28 ft

WATER QUALITY: DTW = 31.42 Transducer Actual Depth = 7.480 transd. read = 5074

Time	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	Notes
1153	7.481		PUMP	ON					
1240			Change sampling method to						
			Modified Traditional Purge						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
flow meter	
turbidity meter	

NOTES AND OBSERVATIONS: Total volume purged ___ ___ gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: I-2
SAMPLE ID: 002

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Showers, cloudy, windy 60's

PROJECT NO: 01.0017869.92
DATE: 11/17/10
SAMPLER(S): MB

WATER COLUMN HEIGHT (ft)

40.13 (DTB) − 31.42 (DTW) = 8.71 (Water Column Height) ft

Well Diameter: _____ in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 8.71 x 0.163 (Multiplier) = 1.42 (Well Volume) gal

1.42 x 1.5 = 2.13 (Designed Purge Volume) gal

TOTAL VOLUME PURGED: _____ gal

WATER QUALITY: DTW = 31.42 Transducer Actual Depth = 7.480 transd. read = 50.74

Time	Volume Purged (gal)	DTW or (Actual Depth)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Notes
1242	0	7.481		PUMP ON					
1253	0.3	7.092	16.00	1.113	8.30	6.56	58.1	—	
1303	0.5	6.827	15.64	1.096	9.33	6.58	65.0	—	
1312	0.75	6.756	15.46	1.103	9.57	6.63	68.3	—	
1319	1.05	6.709	15.88	1.118	9.19	6.69	70.7	—	
1327	1.25	6.586	15.61	1.126	9.29	6.70	70.8	—	
1332	1.40	6.544	15.69	1.130	8.79	6.73	70.9	—	
1337	1.55	6.402	15.75	1.135	8.25	6.75	71.1	—	
1345	1.80	6.374	15.83	1.139	7.64	6.77	71.2	—	
1350	2.0	6.342	15.80	1.136	7.01	6.78	71.4	—	
1355	2.15	6.324	15.77	1.131	6.61	6.80	71.6	—	
1356			START SAMPLE COLLECTION						
1425			SAMPLE COMPLETED : 2 L					IPEC	
1425			PUMP OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	—

NOTES AND OBSERVATIONS:

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

Used two peristaltic pumps in line.

WELL ID: MW 39 - 195

SAMPLE ID: 010

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy 50's

PROJECT NO: 01.0017869.92
DATE: 11/15/10
SAMPLER(S): CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

193.0 to 198.6

SAMPLING PORT

195 1

TOTAL VOLUME PURGED: 0.65 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1127	0	PUMP ON						8/10	70
1140	0.05	16.42	1.281	1.70	6.50	-165.6	—		
1150	0.10	16.34	1.275	1.04	6.57	-165.4	1.28		
1200	0.15	16.18	1.268	0.68	6.67	-166.9	0.99		
1207	0.20	16.03	1.258	0.55	6.67	-174.0	0.59		
1214	0.30	15.98	1.250	0.42	6.79	-184.4	0.51		
1222	0.40	15.80	1.244	0.36	6.90	-198.1	0.53		
1227	0.45	15.78	1.241	0.35	6.91	-202.6	0.54		
1232	0.50	15.77	1.238	0.34	6.93	-205.7	0.50	↓	↓
1233		PUMP OFF							
1234		START SAMPLE COLLECTION							
1325		SAMPLE COMPLETED : 2 L IPEC							
1325		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070429 3

NOTES AND OBSERVATIONS:

WELL ID: MW 39 - 183

SAMPLE ID: 010

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy, 50's

PROJECT NO: 01.0017869.92
DATE: 11/15/10
SAMPLER(S): CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

169.5 to 186.0

SAMPLING PORT

183 2

TOTAL VOLUME PURGED: 1.75 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1139	0.05							8/10	70
1140	0.05	16.51	1.134	1.60	6.89	-91.0		↓	↓
1150	0.20	16.37	1.143	0.97	7.03	-85.5	1.10		
1200	0.50	16.20	1.138	0.62	7.11	-69.6	0.91		
1207	0.70	16.13	1.129	0.50	7.12	-62.1	0.57		
1214	1.0	16.00	1.[illegible]8	0.41	7.12	-59.6	0.62		
1222	1.25	15.86	1.111	0.39	7.12	-57.9	0.59		
1227	1.40	15.84	1.109	0.37	7.13	-57.1	0.61		
1232	1.60	15.80	1.105	0.36	7.13	-56.6	0.63		
1233		PUMP OFF							
1234		START SAMPLE COLLECTION							
1253		SAMPLE COMPLETED : 2 L IPEC							
1253		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070 4293

NOTES AND OBSERVATIONS:

WELL ID: MW 39 - 124

SAMPLE ID: 010

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy 50's

PROJECT NO: 01.0017869.92
DATE: 11/15/10
SAMPLER(S): CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

115.0 to 126.5

SAMPLING PORT

124 3

TOTAL VOLUME PURGED: 3.35 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1127								8/10	70
1140	0.1	16.27	2.645	2.60	6.23	-173.6	—	↓	↓
1150	0.4	16.08	2.664	1.49	6.19	-224.1	16.21		
1200	0.9	15.86	2.653	0.90	6.24	-261.8	11.70		
1207	1.3	15.75	2.642	0.75	6.30	-267.2	7.85		
1214	2.0	15.70	2.570	1.58	6.37	-222.7	10.28		
1222	2.5	15.64	2.549	1.55	6.4	-209.0	7.49		
1227	2.8	15.61	2.548	1.55	6.4	-205.6	7.55		
1232	3.2	15.58	2.547	1.58	6.4	-200.9	7.48	↓	↓
1233		PUMP OFF							
1234		START SAMPLE COLLECTION							
1246		SAMPLE COMPLETED : 2 L IPEC							
1246		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	20070429 3

NOTES AND OBSERVATIONS:

WELL ID: MW 39 - 102

SAMPLE ID: 010

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy 50's

PROJECT NO: 01.0017869.92
DATE: 11/15/10
SAMPLER(S): CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

93.0 to 103.0

SAMPLING PORT

102

4

TOTAL VOLUME PURGED: 0.70 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1359	0	PUMP ON						6/14	32
1411	0.01	15.65	2.540	2.97	6.62	-137.5	—	6/16	34
1421	0.20	15.62	2.548	2.63	6.78	-142.1	1.63		
1431	0.22	15.46	2.549	2.55	6.92	-140.3	1.45		
1438	0.30	15.96	2.535	2.61	6.94	-139.4	1.63		
1448	0.35	16.13	2.543	2.66	6.99	-139.7	0.67		
1455	0.40	15.85	2.547	2.70	7.05	-130.2	0.59		
1505	0.45	15.83	2.537	2.81	7.11	-114.3	0.51		
1514	0.50	16.22	2.537	2.87	7.11	-112.7	0.49		
1519	0.53	16.26	2.537	2.86	7.11	-110.8	0.49		
1524	0.55	16.22	2.538	2.89	7.12	-109.2	0.52	↓	↓
1525		PUMP OFF							
1526		START SAMPLE COLLECTION							
1612		SAMPLE COMPLETED : 2 L IPEC							
1612		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070429 3

NOTES AND OBSERVATIONS:

WELL ID: MW 39 - 84

SAMPLE ID: 010

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy 50's

PROJECT NO: 01.0017869.92
DATE: 11/15/10
SAMPLER(S): CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

76.5 to 85.0

SAMPLING PORT

84 6

TOTAL VOLUME PURGED: 0.80 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1359	0	PUMP ON						6/14	32
1411	0.01	15.74	2.243	6.47	6.54	-109.0	—	6/16	34
1421	0.1	15.70	2.256	3.52	6.51	-71.3	2.13		
1431	0.15	15.59	2.255	3.31	6.51	-61.9	1.74		
1438	0.20	15.76	2.254	3.33	6.51	-54.3	1.83		
1448	0.25	16.09	2.253	3.23	6.57	-44.3	1.44		
1455	0.30	15.97	2.252	3.17	6.56	-36.2	1.48		
1505	0.35	15.88	2.247	3.15	6.58	-23.1	1.39		
1514	0.40	16.10	2.245	3.13	6.60	-17.1	1.45		
1519	0.45	16.19	2.248	3.16	6.62	-10.0	1.47		
1524	0.48	16.14	2.251	3.13	6.63	-4.1	1.43		
1529	0.50	16.09	2.252	3.10	6.62	-0.9	1.39		
1535	0.55	16.01	2.253	3.14	6.62	+1.0	1.40		
1541	0.60	15.98	2.253	3.16	6.62	+1.5	1.42		
1548	0.65	15.95	2.255	3.20	6.61	+1.9	1.45		
1549		PUMP OFF							
1550		START SAMPLE COLLECTION							
1638		SAMPLE COMPLETED : 2 L IPEC							
1638		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	200704293

NOTES AND OBSERVATIONS:

WELL ID: MW 39 - 67

SAMPLE ID: 010

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy 50's

PROJECT NO: 01.0017869.92
DATE: 11/15/10
SAMPLER(S): CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

65.0 to 70.5

SAMPLING PORT

67 7

TOTAL VOLUME PURGED: 1.40 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1359	0	PUMP	ON					6/14	32
1411	0.01	15.86	1.893	9.42	7.27	-65.1	—	6/16	34
1421	0.25	15.87	1.921	10.15	7.40	-25.2	1.15		
1431	0.50	15.90	2.007	10.02	7.50	+18.9	1.10		
1438	0.70	16.10	2.006	9.50	7.47	28.1	1.34		
1448	0.80	16.34	2.027	8.87	7.38	37.2	1.49		
1455	0.90	16.17	2.044	8.36	7.25	40.0	1.42		
1505	1.0	16.22	2.057	7.41	7.17	42.1	1.49		
1514	1.05	16.26	2.060	6.99	7.14	42.4	1.47		
1519	1.08	16.22	2.066	6.83	7.11	43.2	1.39		
1524	1.10	16.24	2.069	6.76	7.11	43.9	1.37		
1529	1.15	16.19	2.080	5.20	7.08	45.4	1.42		
1535	1.20	16.06	2.092	5.16	7.07	47.4	1.45		
1541	1.25	16.03	2.099	5.13	7.06	47.5	1.49	↓	↓
1542		PUMP	OFF						
1543		START SAMPLE COLLECTION							
1698		SAMPLE COMPLETED : 2 L IPEC							
1628		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070 4293

NOTES AND OBSERVATIONS:

WELL ID: MW-52-53
SAMPLE ID: 009

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: MOSTLY CLOUDY, 50

PROJECT NO: 01.0017869.92
DATE: 11/15/10
SAMPLER(S): CB, MB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 47.42 Transducer Actual Depth

Time	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Notes gal
1138	47.42	PUMP	ON					7/7.5	28	
1143	47.89	17.78	1.917	3.88	6.25	-74.0		↓		0.01
1150	48.13	17.49	1.535	2.75	6.55	-87.0	3.12	6/7		0.20
1200	48.12	17.38	1.770	1.91	6.81	-52.7	2.02			0.40
1210	48.12	17.32	1.974	1.26	6.93	-19.9	1.58			0.60
1215	48.12	17.41	2.054	1.12	6.97	-13.7	1.37			0.70
1220	48.13	17.39	2.112	1.09	6.99	-11.8	1.28			0.80
1225	48.13	17.40	2.154	1.10	7.02	-11.4	1.24	↓	↓	0.90
1227	START	SAMP	LE COLLECTION							
1248	END SA	MPLE	COLLECTION: 2L	IPEC						
	PUMP O	FF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070125Y

NOTES AND OBSERVATIONS: Total volume purged 1.15 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-56-83
SAMPLE ID: 011

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: MOSTLY CLOUDY, 52°F

PROJECT NO: 01.0017869.92
DATE: 11/15/10
SAMPLER(S): CB, MB

WATER COLUMN HEIGHT (ft)

83 (DTB) - 47.38 (DTW) = 35.62 ft (Water Column Height)

Well Diameter: 1 in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 35.62 x 0.041 (Multiplier) = 1.46 gal (Well Volume)

1.46 x 1.5 = 2.19 gal (Designed Purge Volume)

TOTAL VOLUME PURGED: 2.40 gal

WATER QUALITY: DTW = 47.38 Transducer Actual Depth

Time	Volume Purged (gal)	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Notes
1343	0	—	PUMP ON						
1349	0.01	—	16.58	0.274	3.96	6.86	72.8	114.6	
1355	0.10	—	16.30	0.782	2.26	6.57	37.6	118.0	
1400	0.25	—	16.09	1.355	0.90	6.54	37.1	146.6	
1405	0.50	—	17.09	1.390	0.76	6.66	31.7	180.4	
1408	0.75	—	16.99	1.583	0.83	6.67	44.2	125.5	
1413	1.00	—	16.89	1.753	1.49	6.73	56.6	62.95	
1416	1.25	—	16.82	1.789	1.83	6.77	62.7	59.17	
1419	1.50	—	16.82	1.800	2.08	6.79	65.9	36.00	
1422	1.75	—	16.77	1.801	2.07	6.81	68.0	38.40	
1425	2.00	—	16.73	1.799	1.90	6.82	69.5	31.83	
1427	2.20	—	16.73	1.794	1.88	6.83	70.1	43.27	
1428	START SAMPLE COLLECTION								
1437	END	SAMPLE COLLECTION: 2L			IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20170123Y

NOTES AND OBSERVATIONS:

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-50~~4~~B
SAMPLE ID: 023

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 40's

PROJECT NO: 01.0017869.92
DATE: 11/12/10
SAMPLER(S): CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 8.20 Transducer Actual Depth 32.735

Time	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	Notes gal
1042	32.738	PUMP	ON						
1102	32.736	20.47	2.534	2.43	6.96	206.0	0.72		0.07
1110	32.736	21.21	2.633	1.30	7.14	199.4	0.62		0.25
1115	32.741	21.83	2.675	0.86	7.25	180.9	0.56		0.30
1120	32.750	22.20	2.684	0.64	7.34	172.3	0.61		0.40
1125	32.755	22.31	2.702	0.61	7.38	157.0	0.55		0.50
1130	32.761	22.42	2.704	0.56	7.44	141.4	0.54		0.60
1135	32.766	22.49	2.707	0.52	7.47	131.2	0.52		0.70
1140	32.777	22.50	2.708	0.49	7.49	132.4	0.51		0.75
1144	START	SAMP	LE COLLECTION						
1210	END SAMPLE	COLLECTION	2.5 LIPE						
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
flow meter	1
turbidity meter	200101254

NOTES AND OBSERVATIONS: Total volume purged 0.90 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-50-66
SAMPLE ID: 028

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 40s

PROJECT NO: 01.0017869.92
DATE: 11/12/10
SAMPLER(S): CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 10.59 Transducer Actual Depth 89.240

Time	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	Notes
1042	~~89.245~~ 7.245	PUMP	ON						gal
1107	88.197	20.26	2.221	1.30	7.19	140.6	1.23		0.05
1110	87.603	21.20	2.221	0.63	7.22	103.7	1.05		0.20
1115	87.760	21.58	2.221	0.49	7.25	73.4	1.12		0.30
1120	87.122	21.76	2.221	0.49	7.26	46.9	0.90		0.38
1125	88.000	21.74	2.220	0.61	7.28	31.7	0.93		0.42
1130	88.140	21.66	2.220	0.64	7.28	22.4	0.90		0.48
1135	88.140	21.61	2.221	0.68	7.28	18.8	0.86		0.54
1140	88.159	21.61	2.222	0.72	7.28	16.8	0.89		0.60
1145	START	SAMPLE COLLECTION							
1230	END SAMPLE	COLLECTION - ALIPEC							
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
flow meter	4
turbidity meter	20070125Y

NOTES AND OBSERVATIONS: Total volume purged 0.80 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl

WELL ID: MW-49-20
SAMPLE ID: 022

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 40S

PROJECT NO: 01.0017869.92
DATE: 11/11/10
SAMPLER(S): CS, MR
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 12.13 Transducer Actual Depth 12.622 transd read = 2.111

Time	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	Notes
1020	12.13								
1150	12.15	PUMP ON							
1215	11.95	13.69	2.645	2.26	7.02	185.7	—		0.10
1230	10.82	14.98	2.649	1.02	7.11	122.9	0.62		0.50
1240	10.62	15.52	2.648	0.81	7.14	118.4	0.61		0.60
1250	10.58	15.70	2.647	0.80	7.15	114.8	0.56		0.75
1256	10.49	15.84	2.645	0.77	7.16	115.9	0.68		0.85
1302	10.33	15.67	2.653	0.70	7.17	114.3	0.62		0.95
1312	10.21	13.69	2.692	0.67	7.17	123.1	0.55		0.90
1318	10.15	12.95	2.652	0.62	7.16	120.8	0.60		1.00
1328	10.06	13.87	2.643	0.65	7.18	113.8	0.62		1.05
1336	9.97	13.90	2.639	0.68	7.17	112.9	0.65		1.10
1342	9.91	13.87	2.635	0.68	7.18	112.0	0.67		1.20
1344	START	SAMPLE COLLECTION							
1423	END SAMPLE COLLECTION				TPE				
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
flow meter	3
turbidity meter	20070125-4

NOTES AND OBSERVATIONS: Total volume purged 1.35 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-49-42
SAMPLE ID: 022

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 40's

PROJECT NO: 01.0017869.92
DATE: 11/16/10
SAMPLER(S): CB/MB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 11.71 Transducer Actual Depth 15.864 Transd reading = 2.713

Time	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	Notes
1104	15.864								
1152	16.092	PUMP ON							
1218	12.553	12.31	2.570	4.18	6.36	215.8	—		0.05
1230	16.790	13.07	2.542	2.35	6.45	159.6	0.62		0.20
1240	16.880	13.92	2.552	2.06	6.47	141.0	0.86		0.30
1250	16.989	14.00	2.567	1.61	6.51	125.1	0.93		0.40
1256	17.071	14.01	2.579	1.57	6.53	117.7	0.93		0.45
1302	17.222	13.93	2.585	1.26	6.55	111.5	0.80		0.50
1312	17.263	13.89	2.590	1.26	6.57	104.1	0.82		0.60
1318	17.321	13.86	2.591	1.25	6.59	102.3	0.81		0.70
1327	START SAMPLE COLLECTION								
1413	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
flow meter	2
turbidity meter	2007012534

NOTES AND OBSERVATIONS: Total volume purged 0.85 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl

WELL ID: MW-49-105
SAMPLE ID: 022

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 40's

PROJECT NO: 01.0017869.92
DATE: 11/11/10
SAMPLER(S): CB/MB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 11.94 Transducer Actual Depth = 13.923 Transd read = 2.399

Time	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	Notes
1033	13.923								
1150	14.577	PUMP ON							
1218	14.891	11.74	2.362	3.38	7.24	237.2	—		0.05
1230	14.981	11.93	2.423	2.21	7.31	202.5	1.13		0.10
1240	15.102	12.07	2.446	1.75	7.31	189.8	1.02		0.20
1250	15.228	12.22	2.462	1.53	7.32	172.9	1.08		0.25
1256	15.305	12.30	2.471	1.36	7.32	165.4	1.02		0.30
1302	15.393	12.35	2.478	1.24	7.32	155.9	0.97		0.35
1312	15.417	12.41	2.482	1.20	7.33	143.3	1.06		0.40
1318	15.516	12.48	2.494	0.91	7.33	133.4	0.93		0.50
1328	15.620	14.09	2.496	1.29	7.34	127.7	0.93		0.60
1336	15.684	14.16	2.501	1.31	7.34	125.6	0.93		0.65
1340	START	SAMPLE COLLECTION							
1418	END SAMPLE	COLLECTION			IPEC				
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	0
flow meter	4
turbidity meter	20070124

NOTES AND OBSERVATIONS: Total volume purged 0.75 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-58-26
SAMPLE ID: 011

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, windy 40's

PROJECT NO: 01.0017869.92
DATE: 11/11/10
SAMPLER(S): CB, MB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 7.43 Transducer Actual Depth = 17.808 transd read = 6.838

Time	(DTW) or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	Notes
1149	7.40	PUMP ON							
1207	7.50	12.53	1.074	1.52	7.70	-26.7	—	0.4	
1212	7.50	12.40	1.079	1.27	7.74	-31.7	4.59		
1220	7.50	11.88	1.090	2.26	7.74	-69.3	4.42		0.06
1230	7.50	11.27	1.097	0.99	7.75	-78.8	3.77		0.1
1239	7.50	11.81	1.095	0.77	7.73	-77.4	3.21		0.15
1249	7.50	11.95	1.097	0.87	7.71	-89.9	3.10		0.20
1259	7.50	11.97	1.099	0.89	7.71	-95.1	3.15		0.25
1305	7.50	11.98	1.105	0.90	7.69	-93.9	3.09	↓	0.30
1307		START SAMPLE COLLECTION							
1512		SAMPLE COMPLETED: 2 L IPEC							
		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
flow meter	5
turbidity meter	20070423

NOTES AND OBSERVATIONS: Total volume purged 0.45 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-58-65
SAMPLE ID: 011

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, windy 40's

PROJECT NO: 01.0017869.92
DATE: 11/11/10
SAMPLER(S): CB, MB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 7.21 Transducer Actual Depth = 62.675 Transd. read = 7.614

Time	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	Notes
1149	62.663		PUMP	ON					
1207	62.576	12.91	0.908	1.27	6.36	-77.9	—	0.8	0.10
1212	62.591	13.13	0.905	0.64	6.44	-77.0			0.15
1220	62.652	12.69	0.903	1.05	6.61	-98.7	1.10		0.30
1230	62.631	11.88	0.901	0.60	6.74	-100.4	0.90		0.40
1239	62.670	12.99	0.898	0.45	6.88	-112.0	0.80		0.50
1249	62.705	13.40	0.895	0.50	6.98	-114.0	0.55		0.65
1259	62.733	13.47	0.891	0.48	6.99	-113.3	0.49		0.80
1309	62.760	13.49	0.890	0.46	7.01	-112.9	0.53	↓	0.90
1307	START SAMPLE C								
1353	SAMPLE COMPLETED				: 2	L IPEC			

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
flow meter	1
turbidity meter	200704293

NOTES AND OBSERVATIONS: Total volume purged 1.05 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-66-21
SAMPLE ID: 015

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, WIND, 40s

PROJECT NO: 01.0017869.92
DATE: 11/10/10
SAMPLER(S): CB, MB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 12.67 Transducer Actual Depth 8.088

Time	DTW or (Actual Depth)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	Notes GAL
1027	8.160	PUMP	P ON						
1106	8.210	15.34	1.217	2.48	7.06	143.5	13.15		0.05
1115	8.407	15.96	1.190	0.95	7.16	-154.8	10.18		0.20
1125	8.584	15.14	1.153	0.42	7.17	-159.0	4.87		0.35
1135	8.960	14.91	1.144	0.40	7.19	-157.4	5.90		0.50
1140	8.993	15.18	1.129	0.32	7.22	-159.9	4.45		0.60
1145	9.025	16.00	1.122	0.28	7.24	-151.9	6.01		0.70
1150	9.110	16.04	1.116	0.22	7.26	-153.8	4.84		0.80
1155	9.185	16.60	1.113	0.20	7.27	-177.6	5.10		0.90
1200	9.245	16.44	1.111	0.24	7.25	-177.0	5.83		0.95
1205	9.241	16.42	1.108	0.24	7.24	-176.9	5.58		1.05
1210	9.295	16.40	1.103	0.24	7.26	-175.8	5.71		1.10
1213	START	SAMPL	E COLLECTION						
1513	END S	AMPLE	COLLECTION	2	IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	7
flow meter	3
turbidity meter	20070293

NOTES AND OBSERVATIONS: Total volume purged 1.30 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-66-36
SAMPLE ID: 014

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, WINDY, 40's

PROJECT NO: 01.0017869.92
DATE: 11/10/10
SAMPLER(S): CB, MS
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 12.05 Transducer Actual Depth 12.413

Time	DTW or (Actual Depth)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	Notes gal
1027	12.535	PUMP	ON						
1100	12.744	13.46	2.360	2.14	6.54	-98.0	1.70		0.05
1105	12.826	13.70	2.427	1.19	6.73	-97.8	1.71		0.10
1125	12.874	13.93	2.483	0.83	6.76	-94.1	1.22		0.25
1135	12.949	14.43	2.519	0.75	6.81	-85.4	0.80		0.40
1140	12.947	14.67	2.558	0.69	6.83	-78.7	0.84		0.50
1145	13.057	15.23	2.549	0.53	6.82	-80.1	0.81		0.60
1150	13.082	15.68	2.560	0.49	6.88	-85.9	0.82		0.70
1155	13.137	15.72	2.556	0.41	6.90	-90.1	0.81		0.80
1159	START	SAMPLE COLLECTION							
1233	END SAMPLE	COLLECTION: 2L			IPEC				
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
flow meter	4
turbidity meter	20070-1243

NOTES AND OBSERVATIONS: Total volume purged 0.90 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW 67 - 340

SAMPLE ID: 014

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy, windy 40's

PROJECT NO: 01.0017869.92
DATE: 11/10/10
SAMPLER(S): CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

335.3 to 347.9

SAMPLING PORT

340

TOTAL VOLUME PURGED: 1.65 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1233	0	PUMP ON						6/6	45
1241	0.1	16.47	0.731	1.49	6.67	-90.4	—	6/6	45
1246	0.2	16.37	0.731	0.74	6.78	-107.9	1.58	6/6	50
1254	0.4	15.89	0.728	0.41	6.98	-171.4	1.27		
1301	0.6	15.58	0.724	0.30	7.02	-178.4	0.93		
1308	0.75	15.51	0.723	0.28	7.03	-186.7	1.05		
1315	1.0	15.52	0.725	0.23	7.04	-203.5	1.01		
1320	1.3	15.53	0.726	0.22	7.03	-211.6	0.98		
1328	1.5	15.55	0.728	0.21	7.05	-215.9	1.04		
1329		PUMP OFF							
1330		START SAMPLE COLLECTION							
1353		SAMPLE COMPLETED : 2 L IPEC							
1353		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	
turbidity meter	200701254

NOTES AND OBSERVATIONS:

WELL ID: MW 67 - 323

SAMPLE ID: 014

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy, windy 40's

PROJECT NO: 01.0017869.92
DATE: 11/10/10
SAMPLER(S): CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

317.8 to 328.3

SAMPLING PORT

323 2

TOTAL VOLUME PURGED: 2.30 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1233	0	PUMP ON						6/6	45
1241	0.05	16.39	0.876	1.70	6.72	-117.0	—	6/6	45
1246	0.1	16.27	0.870	0.80	6.82	-124.5	2.01	6/6	50
1254	0.25	16.03	0.868	0.09	6.95	-167.8	1.90		
1301	0.50	16.28	0.860	—	6.88	-188.6	1.32		
1308	0.65	18.41	0.780	—	6.88	-198.2	0.98		
1315	0.85	24.91	0.593	—	6.88	-206.2	1.07		
1320	1.0	33.75	0.411	—	6.86	-940.2	0.98		
1330		REPLACED YSI #6 with YSI #2					1.07		
	and continue readings								
1343	1.40	16.39	0.850	0.22	7.01	253.5	—		
1353	1.60	16.00	0.843	0.10	6.98	-279.5	1.01		
1359	1.85	15.69	0.826	0.08	6.97	-286.0	0.98		
1406	2.00	15.72	0.824	0.07	6.98	-283.2	0.94		
1411	2.15	15.76	0.821	0.07	6.98	-281.9	0.99		
1412		PUMP OFF							
1413		START SAMPLE COLLECTION							
1435		SAMPLE COMPLETED ; 2 L IPEC							
1435		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070254

NOTES AND OBSERVATIONS:

WELL ID: MW 67 - 276

SAMPLE ID: 014

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy, windy 40's

PROJECT NO: 01.0017869.92
DATE: 11/10/10
SAMPLER(S): CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

250.8 to 281.3

SAMPLING PORT

276 3

TOTAL VOLUME PURGED: 3.05 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1233	0	PUMP ON						6/6	45
1241	0.15	16.84	0.935	0.71	6.42	-63.4	~	6/6	45
1246	0.25	16.63	0.936	0.43	6.56	-78.0	0.93	6/6	50
1254	0.60	16.27	0.932	0.20	6.69	-63.7	0.88		
1301	0.90	15.97	0.928	0.16	6.72	-50.8	0.87		
1308	1.10	15.87	0.924	0.17	6.73	-44.5	0.70		
1315	1.40	15.87	0.922	0.30	6.74	-42.4	0.72		
1320	1.70	16.70	0.919	0.28	6.73	-40.2	0.74		
1343	2.50	16.78	0.924	0.11	6.76	-39.5	1.00		
1353	2.70	16.74	0.927	0.09	6.73	-38.8	1.02		
1359	2.90	16.72	0.927	0.08	6.74	-38.0	1.05		
1400		PUMP OFF							
1401		START SAMPLE COLLECTION							
1416		SAMPLE COMPLETED : 2 L IPEC							
1416		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070125 4

NOTES AND OBSERVATIONS:

WELL ID: MW 67 - 219

SAMPLE ID: 014

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy, windy 40's

PROJECT NO: 01.0017869.92
DATE: 11/10/10
SAMPLER(S): CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

209 to 229.8

SAMPLING PORT

219 4

TOTAL VOLUME PURGED: 2.25 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1233	0	PUMP ON						6/6	45
1241	0.2	17.00	1.144	1.09	6.54	-123.5	—	6/6	45
1246	0.35	16.64	1.151	0.71	6.62	-122.7	0.95	6/6	50
1254	0.65	16.32	1.152	0.40	6.59	-110.3	0.85	↓	↓
1301	0.90	16.02	1.150	0.32	6.57	-109.9	0.89		
1308	1.50	16.01	1.149	0.28	6.58	-107.5	0.74		
1315	1.75	16.02	1.148	0.23	6.62	-104.0	0.85		
1320	2.10	16.04	1.148	0.21	6.59	-102.7	0.75	↓	↓
1321		PUMP OFF							
1322		START SAMPLE COLLECTION							
1340		SAMPLE COMPLETED : 2 L IPEC							
1340		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	20070254

NOTES AND OBSERVATIONS:

WELL ID: MW 67 - 173

SAMPLE ID: 015

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy, windy, 40's

PROJECT NO: 01.0017869.92
DATE: 11/10/10
SAMPLER(S): CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

164.8 to 188.3

SAMPLING PORT

173 5

TOTAL VOLUME PURGED: 1.25 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1028	0	PUMP						8/8	20
1040	0.2	14.71	1.211	0.81	6.51	-14.3	—	↓	↓
1047	0.25	14.62	1.208	0.60	6.55	-54.6	6.27		
1052	0.30	14.65	1.197	0.47	6.60	-95.1	2.82		
1102	0.50	14.79	1.177	0.28	6.66	-152.8	2.82		
1114	0.70	14.80	1.170	0.25	6.67	-168.3	2.71		
1119	0.80	14.93	1.164	0.25	6.68	-177.3	2.66		
1126	0.90	14.91	1.157	0.21	6.70	-202.4	2.60		
1131	1.00	14.91	1.151	0.21	6.71	-210.9	2.58		
1136	1.10	14.90	1.149	0.20	6.72	-217.8	2.53	↓	↓
1137		PUMP OFF							
1138		START SAMPLE COLLECTION							
1204		SAMPLE COMPLETED : 2 L IPEC							
1204		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070125 4

NOTES AND OBSERVATIONS:

WELL ID: MW 67 - 105

SAMPLE ID: 014

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy, windy 40's

PROJECT NO: 01.0017869.92
DATE: 11/10/10
SAMPLER(S): CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

90.3 to 110.8

SAMPLING PORT

105 6

TOTAL VOLUME PURGED: 1.15 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1028	0	PUMP ON						8 / 8	20
1040	0.2	14.38	1.517	0.81	6.44	-132.4	—		
1047	0.3	14.32	1.509	0.63	6.50	-138.2			
1052	0.4	14.36	1.506	0.50	6.56	-141.2	2.14		
1102	0.6	14.42	1.506	0.39	6.64	-142.9	1.71		
1107	0.75	14.53	1.508	0.36	6.67	-145.1	1.71		
1114	0.90	14.56	1.506	0.35	6.71	-147.6	1.68		
1119	1.00	14.60	1.502	0.35	6.72	-148.2	1.65	↓	↓
1120		PUMP OFF							
1121		START SAMPLE COLLECTION							
1142		SAMPLE COMPLETED : 2 L					IPEC		
1142		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070125 4

NOTES AND OBSERVATIONS:

WELL ID: MW 67 - 39

SAMPLE ID: 015

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy, windy 40's

PROJECT NO: 01.0017869.92
DATE: 11/10/10
SAMPLER(S): CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

28.8 to 54.3

SAMPLING PORT

39 7

TOTAL VOLUME PURGED: 2.45 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1028	0	PUMP ON						8/8	20
1040	0.3	15.01	3.504	1.54	5.78	-116.8	—		
1047	0.45	15.06	3.595	0.98	5.92	-139.0			
1052	0.60	15.20	3.623	0.75	6.07	-166.0	1.24		
1102	1.00	15.22	3.682	0.56	6.27	-179.5	1.17		
1107	1.20	15.33	3.678	0.49	6.33	-195.0	1.08		
1114	1.50	15.40	3.680	0.50	6.45	-200.6	1.05		
1119	1.70	15.42	3.681	0.49	6.49	-197.7	1.00		
1126	1.85	PUMP 4	3.701	0.44	6.57	-206.2	1.00		
1131	2.15	1555	3.704	0.42	6.61	-210.0	1.01		
1136	2.30	1556	3.705	0.40	6.63	-207.6	0.98	↓	↓
1137		PUMP	OFF						
1137		START	SAMPLE COLLECTION						
1149		SAMPLE	COMPLETED ; 2	L IPEC					
1149		PUMP	OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	20070125 4

NOTES AND OBSERVATIONS:

WELL ID: MW-62-18
SAMPLE ID: 015

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: WINDY, P. CLOUDY, 40

PROJECT NO: 01.0017869.92
DATE: 11/09/16
SAMPLER(S): CB, MB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 12.71 Transducer Actual Depth 3.728

Time	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	Notes
									gal
1000	4.115	PUMP	PURG						
1015	4.275	13.05	1.936	2.96	7.44	197.9	2.13		0.01
1025	4.382	11.86	2.117	3.03	7.41	161.1	1.50		0.1
1035	4.504	10.17	2.242	3.49	7.42	115.7	1.00		0.2
1045	4.6118	10.27	2.244	3.44	7.42	55.6	0.65		0.25
1050	4.667	10.24	2.585	3.25	7.44	27.4	0.45		0.3
1055	4.720	10.87	3.712	2.81	7.45	6.5	0.39		0.32
1100	4.787	10.85	3.710	2.20	7.41	-19.7	0.37		0.36
1105	4.842	10.82	3.715	2.01	7.44	-25.1	0.35		0.40
1110	4.906	10.80	3.719	1.98	7.44	-29.8	0.34		0.44
1116	START	SAMPLE	COLLECTION						
1157	END SAMPLE	COLLECTION	2, 1B	FE					

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
flow meter	2
turbidity meter	2010701554

NOTES AND OBSERVATIONS: Total volume purged 0.55 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-62-37
SAMPLE ID: 015

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: WINDY, P. CLOUDY, 40

PROJECT NO: 01 0017869.92
DATE: 11/04/10
SAMPLER(S): CB, DAB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 11.91 Transducer Actual Depth 10.1631

Time	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	Notes #1
1000	10.1725	PUMP	PUMP						
1015	10.872	10.73	1.513	1.80	7.33	-84.16	1.74		0.101
1025	10.923	10.71	1.507	1.21	7.37	-92.4	0.83		0.07
1035	11.005	10.42	1.505	1.01	7.45	-103.1	0.72		0.15
1045	11.064	10.36	1.504	1.01	7.46	-103.2	0.70		0.22
1050	11.096	10.41	1.507	0.85	7.47	-104.5	0.69		0.28
1055	11.134	10.43	1.504	0.87	7.48	-106.8	0.67		0.32
1100	11.182	10.46	1.505	0.89	7.49	-108.7	0.66		0.35
1108	START SAMPLE COLLECTION								
1156	END SAMPLE COLLECTION: 2L TPH								
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
flow meter	4
turbidity meter	20070121-1

NOTES AND OBSERVATIONS: Total volume purged 0.150 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW 62 - 182

SAMPLE ID: 015

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy, windy 40's

PROJECT NO: 01.0017869.92
DATE: 11/9/10
SAMPLER(S): CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

177.6 to 198.7

SAMPLING PORT

182

TOTAL VOLUME PURGED: 1.45 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1310	0	PUMP ON						6/4	30
1318	0.01	16.29	1.250	1.87	6.61	-92.9	—		
1323	0.1	16.25	1.238	0.94	6.70	-103.7	1.27		
1328	0.2	16.37	1.225	0.67	6.82	-90.7	0.92		
1335	0.35	16.14	1.226	0.32	6.93	-81.6	1.01		
1340	0.50	15.96	1.225	0.27	7.00	-57.5	0.77		
1350	0.60	15.87	1.224	0.21	7.08	-43.5	0.56		
1358	0.80	15.91	1.224	0.23	7.10	-40.0	0.49		
1405	1.0	15.88	1.224	0.21	7.10	-38.2	0.42		
1410	1.15	15.88	1.224	0.21	7.11	-37.4	0.40		
1416	1.30	15.88	1.225	0.21	7.12	-36.5	0.43		
1417		PUMP OFF							
1417		START SAMPLE COLLECTION							
1443		SAMPLE COMPLETED : 2 L IPEC							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070429 3

NOTES AND OBSERVATIONS:

WELL ID: MW 62 - 138

SAMPLE ID: 015

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy, windy 40's

PROJECT NO: 01.0017869.92
DATE: 11/9/10
SAMPLER(S): CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

126.1 to 143.6

SAMPLING PORT

138 3

TOTAL VOLUME PURGED: 1.65 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1310	0	PUMP ON						6/4	30
1318	0.05	16.55	1.565	1.60	6.83	1.9	—		
1323	0.20	16.53	1.588	0.90	7.02	-6.3	0.93		
1328	0.35	16.65	1.609	0.63	7.23	-6.3	0.36		
1335	0.50	16.29	1.629	0.45	7.32	-4.5	0.72		
1340	0.60	15.99	1.631	0.38	7.34	-2.9	0.80		
1350	0.80	16.25	1.631	0.33	7.37	-2.0	0.54		
1358	1.0	16.30	1.633	0.30	7.38	-1.7	0.39		
1505	1.3	16.34	1.632	0.29	7.38	-1.4	0.36		
1410	1.5	16.36	1.631	0.28	7.38	-1.1	0.39	↓	↓
1411		PUMP OFF							
1412		START							
1431		SAMPLE COMPLETED ; 2 L IPEC							
1431		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070429 3

NOTES AND OBSERVATIONS:

WELL ID: MW 62 - 53

SAMPLE ID: 014

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy, windy 40's

PROJECT NO: 01.0017869.92
DATE: 11/9/10
SAMPLER(S): CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

49.6 to 54.1

SAMPLING PORT

53 6

TOTAL VOLUME PURGED: 0.70 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1043	0	PUMP ON						5 | 6	25
1050	0.05	14.95	1.431	1.74	6.14	-91.2	—		
1058	0.10	13.60	1.440	0.94	6.28	-58.7	4.08		
1105	0.20	12.73	1.398	0.58	6.84	-43.2	5.67		
1113	0.25	12.17	1.393	0.46	6.88	-8.1	4.81		
1121	0.30	11.78	1.387	0.39	6.93	20.7	4.68		
1128	0.35	11.80	1.385	0.33	6.99	25.5	4.41		
1137	0.40	11.81	1.384	0.31	7.03	33.7	4.22		
1142	0.45	11.83	1.382	0.30	7.03	37.9	4.07		
1147	0.50	11.82	1.381	0.29	7.04	39.1	4.00		
1152	0.55	11.81	1.380	0.29	7.05	40.4	3.96	↓	↓
1153		PUMP OFF							
1154		START SAMPLE COLLECTION							
1249		SAMPLE COMPLETED : 2 L IPEC							
1249		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	200704293

NOTES AND OBSERVATIONS:

WELL ID: MW 62 - 71

SAMPLE ID: 015

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy, windy 40's

PROJECT NO: 01.0017869.92
DATE: 11/9/10
SAMPLER(S): CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

61.1 to 82.6

SAMPLING PORT

71 5

TOTAL VOLUME PURGED: 1.45 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1043	0	PUMP ON						5/6	35
1050	0.01	14.15	1.337	2.00	6.72	59.0	-	↓	↓
1058	0.20	14.42	1.318	0.69	7.07	-10.6	0.51		
1105	0.35	14.45	1.416	0.69	7.29	-48.2	0.70		
1113	0.55	14.43	1.415	0.48	7.36	-65.4	0.78		
1121	0.75	14.29	1.413	0.39	7.4	-72.2	0.77		
1128	1.0	14.33	1.411	0.36	7.42	-77.9	0.79		
1137	1.20	14.32	1.410	0.34	7.43	-79.4	0.80		
1142	1.30	14.31	1.408	0.34	7.44	-80.2	0.78	↓	↓
1143		PUMP OFF							
1144		START SAMPLE COLLECTION							
1102		SAMPLE COMPLETED : 2 L IPEC							
1102		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070 4293

NOTES AND OBSERVATIONS:

WELL ID: MW 62 - 92

SAMPLE ID: 015

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy, Windy 40's

PROJECT NO: 01.0017869.92
DATE: 11/9/10
SAMPLER(S): CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

88.16 to 99.1

SAMPLING PORT

92 4

TOTAL VOLUME PURGED: 1.35 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (^{0}C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1043	0	PUMP ON						5 | 6	25
1050	0.01	13.48	1.405	2.23	7.11	-113.3			
1058	0.20	13.96	1.376	1.01	6.99	-129.2	0.53		
1105	0.25	13.80	1.323	0.70	6.42	-114.3	1.23		
1113	0.40	13.61	1.324	0.50	6.46	-103.7	1.05		
1121	0.60	13.64	1.319	0.43	6.49	-95.1	0.60		
1128	0.80	13.55	1.320	0.40	6.53	-106.1	0.50		
1137	1.00	13.91	1.319	0.37	6.56	-97.1	0.57		
1142	1.10	13.97	1.318	0.36	6.58	-97.3	0.54		
1147	1.20	14.00	1.321	0.35	6.59	-96.6	0.53	↓	↓
1148		PUMP OFF							
1149		START SAMPLE COLLECTION							
1115		SAMPLE COMPLETED : 2 L IPEC							
1115		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	20070429 3

NOTES AND OBSERVATIONS:

WELL ID: MW-05S
SAMPLE ID: 015

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: RAIN, WIND, LOW 40's

PROJECT NO: 01.0017869.92
DATE: 11/08/10
SAMPLER(S): CB, MB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 5.87 Transducer Actual Depth 8.515

Time	DTW or (Actual Depth)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	Notes gal
1204	8.514	PUMP DOWN							
1235	8.086	19.19	1.747	6.64	7.37	174.3	4.43	21	0.01
1240	8.094	19.30	1.733	6.15	7.47	171.1	4.12		0.04
1245	8.132	19.39	1.723	5.96	7.53	171.0	3.43		0.07
1250	8.157	19.41	1.722	5.98	7.58	170.3	2.59		0.10
1255	8.182	19.47	1.717	6.26	7.61	169.3	2.98		0.12
1300	8.191	19.50	1.715	6.09	7.65	167.7	1.74		0.14
1305	8.204	19.57	1.711	6.56	7.67	166.9	1.94		0.16
1310	8.220	19.57	1.709	6.57	7.69	165.8	1.89		0.18
1315	8.238	19.57	1.707	6.58	7.71	164.7	1.84		0.20
1316	START SAMPLE COLLECTION								
1456	END SAMPLE COLLECTION. 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
flow meter	4
turbidity meter	20070127

NOTES AND OBSERVATIONS: Total volume purged 0.35 gal

Depth and Depth to Water - DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW 30 - 69 (036)

SAMPLE ID: 036

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Showers, 53°F

PROJECT NO: 01.0017869.92
DATE: 11/05/10
SAMPLER(S): CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

67.3 to 71.3

SAMPLING PORT

69

TOTAL VOLUME PURGED: 0.80 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1050	0	PUMP	ON					6 | 12	40
1054	0.01	23.25	1.226	8.48	8.01	95.2	—		
1059	0.10	23.94	1.202	8.70	8.15	88.7	—		
1105	0.25	24.33	1.203	8.63	8.17	76.0	—		
1110	0.35	24.46	1.190	8.76	8.18	66.1	—		
1115	0.45	24.45	1.205	8.82	8.17	60.2	—		
1120	0.55	24.47	1.206	8.74	8.17	57.5	—		
1125	0.65	24.44	1.208	8.80	8.17	55.2	—	▼	▼
1127	START SAMPLE COLLECTION								
1156	END SAMPLE COLLECTION: 2L				IPE				
				0.5L	IPE				
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	—

NOTES AND OBSERVATIONS:

WELL ID: MW 30-84

SAMPLE ID: 027

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Showers, 53°F

PROJECT NO: 01.0017869.92
DATE: 11/05/10
SAMPLER(S): CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

77.3 to 85.4

SAMPLING PORT

84

TOTAL VOLUME PURGED: 0.85 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1050	0	PUMP	ON					6 | 12	40
1059	0.01	22.14	1.717	3.93	6.73	+65	—		
1105	0.07	22.11	1.731	3.91	6.81	-20.5	—		
1110	0.12	22.09	1.732	3.74	6.80	-17.2	—		
1115	0.15	21.84	1.737	3.70	6.90	-15.1	—		
1120	0.18	21.51	1.741	3.64	6.93	-10.3	—		
1125	0.20	21.10	1.744	3.63	6.95	-6.9	—		
1130	0.22	20.77	1.745	3.42	6.97	-5.9	—		
1135	0.25	20.42	1.745	3.70	6.98	-6.7	—		
1140	0.40	23.08	1.78	9.19	7.31	-16.4	—		44
1145	0.50	23.39	1.736	9.64	7.77	-13.6	—		
1150	0.60	23.44	1.730	9.65	7.81	-12.1	—		
1155	0.70	23.45	1.735	9.66	7.80	-11.5	—		
1155	START	SAMPLE	COLLECTION						
1235	END SAMPLE COLLECTION			DUP 2 @ IPEC					
				015 L 1/88					
	Pump OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	—

NOTES AND OBSERVATIONS:

WELL ID: MW-36-24
SAMPLE ID: 020

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Rain 40's

PROJECT NO: 01.0017869.92
DATE: 11/4/10
SAMPLER(S): CB, MB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 4.72 Transducer Actual Depth 59.241 transd read - 6.868

Time	DTW or (Actual Depth)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	purged Notes H_2O (gal)
1455	59.283		PUMP ON						
1501	59.283	29.73	5.500	4.60	7.24	19.2	3.31		
1506	59.285	28.61	5.531	1.96	7.23	26.1	1.40		
1516	59.287	28.53	5.521	0.70	7.21	37.6	1.14		0.15
1522	59.281	27.90	5.515	0.57	7.29	34.5			0.25
1530	59.278	27.99	5.494	0.24	7.30	32.6			0.45
1537	59.274	28.46	5.485	0.34	7.36	32.9			0.75
1546	59.277	28.49	5.482	0.33	7.38	33.1			0.85
1552	59.273	28.51	5.483	0.32	7.41	34.0			0.95
1553		START SAMPLE COLLECTION							
1615		SAMPLE COMPLETED ; 2 L IPEC							
1615		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
flow meter	2
turbidity meter	20070429 3

NOTES AND OBSERVATIONS: Total volume purged _____ gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-36-41
SAMPLE ID: 014

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Rain 40's

PROJECT NO: 01.0017869.92
DATE: 11/4/10
SAMPLER(S): CB, MB

WATER COLUMN HEIGHT (ft)

41 (DTB) − 4.97 (DTW) = 36.03 ft (Water Column Height)

Well Diameter: _____ in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 36.03 x 0.041 (Multiplier) = 1.48 gal (Well Volume)

1.48 x 1.5 = 2.22 gal (Designed Purge Volume)

TOTAL VOLUME PURGED: _____ gal

WATER QUALITY: DTW = Transducer Actual Depth

Time	Volume Purged (gal)	DTW or Actual Depth	Temp (^{0}C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Notes
1455	0	—	PUMP ON						
1501	0.1	—	24.70	4.502	0.70	8.07	-156.0	3.36	
1506	0.4	—	24.91	4.208	1.14	7.94	-143.5	2.23	
1516	0.9	—	25.31	3.719	1.25	7.81	-120.2	1.86	
1522	1.2	—	25.64	3.184	1.11	7.72	-111.5	1.75	
1530	1.4	—	25.91	2.866	1.20	7.63	-103.2	1.59	
1537	1.65	—	26.11	2.816	1.27	7.61	-96.4	2.19	
1546	1.80	—	26.27	2.792	1.32	7.59	-90.2	2.95	
1558	1.95	—	26.14	2.837	1.51	7.56	-85.9	3.76	
1605	2.15	—	26.24	2.861	1.62	7.55	-82.7	4.99	
1606			START SAMPLE COLLECTION						
1655			SAMPLE COMPLETED: 2 L IPEC						
1655			PUMP OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070429 3

NOTES AND OBSERVATIONS:

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-36-52
SAMPLE ID: 019

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Rain 40's

PROJECT NO: 01.0017869.92
DATE: 11/4/10
SAMPLER(S): CB, MB

WATER COLUMN HEIGHT (ft)

52 (DTB) − 5.36 (DTW) = 46.640 ft (Water Column Height)

Well Diameter: _____ in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 46.640 x 0.041 (Multiplier) = 1.912 gal (Well Volume)

1.912 x 1.5 = 2.87 gal
Designed Purge Volume

TOTAL VOLUME PURGED: _____ gal

WATER QUALITY: DTW = 5.36 Transducer Actual Depth 46.217 Transd read = 6.353

Time	Volume Purged (gal)	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Notes
1455	0	46.217	PUMP ON						
1501	0.25	44.521	23.92	1.923	0.34	7.09	-78.1	3.09	
1506	0.55	41.386	23.62	1.917	0.29	7.09	-73.5	1.21	
1516	1.0	38.191	23.93	1.822	0.29	7.08	-80.4	1.49	
1522	1.50	35.428	23.86	1.763	0.21	7.07	-80.4	1.36	
1530	1.90	32.811	23.63	1.696	0.25	7.07	-81.5	1.49	
1537	2.35	29.585	23.47	1.716	0.20	7.06	-75.7	1.44	
1545	2.75	27.586	23.28	1.728	0.19	7.06	-76.9	1.49	
1546		START SAMPLE COLLECTION							
1555		SAMPLE COMPLETED: 2 L IPEC							
1555		PUMP off							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070 4293

NOTES AND OBSERVATIONS:

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-37-22
SAMPLE ID: 020

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: RAIN, 40's

PROJECT NO: 01.0017869.92
DATE: 11/04/10
SAMPLER(S): CB, MB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 9.79 Transducer Actual Depth 12.131

Time	DTW or (Actual Depth)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	Notes gal
1052	12.144	PUMP	P ON						
1135	12.105	25.26	4.350	2.32	7.29	-29.3	1.40		0.01
1140	12.132	25.35	4.363	2.28	7.29	-40.5	1.27		0.05
1145	12.146	25.12	4.379	2.15	7.29	-43.0	1.30		0.08
1150	12.144	24.83	4.388	1.97	7.29	-43.0	1.31		0.10
1155	12.119	24.91	4.379	1.90	7.28	-48.5	1.16		0.12
1200	12.136	24.99	4.380	1.95	7.29	-50.1	1.00		0.14
1205	12.088	25.07	4.381	2.00	7.29	-51.8	1.02		0.16
1210	12.090	25.02	4.385	1.97	7.29	-51.9	1.01		0.18
12.15	START	SAMPLE	COLLECTION						
1428	END SAMPLE	COLLECTION: 2	IPEC						
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
flow meter	1
turbidity meter	200701254

NOTES AND OBSERVATIONS: Total volume purged 0.32 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-37-32
SAMPLE ID: 020

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: RAIN, 40's

PROJECT NO: 01.0017869.92
DATE: 11/04/10
SAMPLER(S): CB, MB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 9.70 Transducer Actual Depth 14.846

Time	DTW or (Actual Depth)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	Notes gal
1052	14.859	PUMP ON							0
1140	14.829	25.14	3.101	1.33	7.18	213.4	0.57		0.01
1145	14.830	25.07	3.086	1.18	7.17	206.9	0.23		0.05
1150	14.821	25.01	3.095	1.07	7.18	197.1	0.22		0.10
1155	14.840	25.19	3.088	0.96	7.21	195.0	0.33		0.15
1200	14.842	25.36	3.079	0.77	7.23	191.9	0.06		0.20
1205	14.798	25.59	3.072	0.75	7.25	187.5	0.01		0.25
1210	14.845	25.73	3.073	0.72	7.28	181.4	0.00		0.30
1215	14.831	25.86	3.075	0.70	7.28	181.3	0.00		0.35
1220	14.821	25.96	3.076	0.66	7.28	179.7	0.00		0.40
1225	14.811	25.93	3.078	0.64	7.29	177.4	0.00		0.45
1226	START SAMPLE COLLECTION								
1314	END SAMPLE COLLECTION / 2" IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
flow meter	4
turbidity meter	20070125Y

NOTES AND OBSERVATIONS: Total volume purged 0.55 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-37-40
SAMPLE ID: 020

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Rain 40's

PROJECT NO: 01.0017869.92
DATE: 11/4/10
SAMPLER(S): CB, MB

WATER COLUMN HEIGHT (ft)

40 (DTB) − 8.63 (DTW) = 31.37 ft (Water Column Height)

Well Diameter: 1 in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 31.37 x 0.041 (Multiplier) = 1.29 gal (Well Volume)

1.29 x 1.5 = 1.93 gal (Designed Purge Volume)

TOTAL VOLUME PURGED: 2.10 gal

WATER QUALITY: DTW = 8.63 Transducer Actual Depth 31.231

Time	Volume Purged (gal)	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Notes: purged H_2O (gal)
1123	0	PUMP ON							
1126	0.05	~	25.98	1.945	0.99	7.14	-142.3	—	
1130	0.15	—	26.17	1.931	0.48	7.23	-201.4	9.50	
1135	0.50	—	26.10	1.908	0.27	7.27	-235.9	978.1	
1140	0.90	—	25.90	1.902	0.14	7.26	-245.9	106.7	
1145	1.15	—	25.70	1.898	0.12	7.26	-239.2	519.2	
1150	1.50	—	25.76	1.895	0.14	7.27	-222.8	1011	
1155	1.80	—	25.75	1.892	0.20	7.28	-204.2	1035	
1157	1.95	—	25.74	1.892	0.22	7.28	-201.9	>1100	
1158			START SAMPLE COLLECTION						
1206			SAMPLE COMPLETED : 2 L IPEC						
			PUMP OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	200704293

NOTES AND OBSERVATIONS:

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

Continue purging after sampling to de-silt well.. Turbidity >1100 NTU. Very silty bed.

WELL ID: MW-37-57
SAMPLE ID: 020

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: RAIN, 40's

PROJECT NO: 01.0017869.92
DATE: 11/04/10
SAMPLER(S): CL, MB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 8.45 Transducer Actual Depth 42.247

Time	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	Notes
1052	42.235	PUMP	ON						gal
1130	41.241	24.17	1.943	3.24	6.72	151.7	—		
1135	41.111	24.38	1.937	3.16	6.73	140.4	0.86		0.05
1140	41.343	24.39	1.935	2.91	6.75	134.4	0.87		0.07
1145	41.337	24.16	1.937	2.63	6.77	127.9	0.80		0.09
1150	41.332	23.80	1.929	2.47	6.78	123.2	0.82		0.11
1155	41.309	23.96	1.927	2.39	6.79	118.3	0.51		0.13
1200	41.315	24.16	1.918	2.29	6.82	117.3	0.59		0.15
1205	41.330	24.32	1.907	2.31	6.84	116.8	0.42		0.17
1210	42.141	24.49	1.900	2.48	6.86	117.0	0.42		0.19
1215	42.182	24.38	1.896	2.37	6.87	116.8	0.42		0.21
1219	START SAMPLE COLLECTION								
1349	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
flow meter	3
turbidity meter	20070127 54

NOTES AND OBSERVATIONS: Total volume purged 0.35 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW 3L - 49

SAMPLE ID: 028

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 40's

PROJECT NO: 01.0017869.92
DATE: 11/03/10
SAMPLER(S): CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

34.8 to 49.3

SAMPLING PORT

49

TOTAL VOLUME PURGED: 3.90 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1050	0	PUMP	ON					1/7	29
1055	0.1	18.29	1.648	9.33	6.47	128.3	----		
1058	0.25	18.47	1.651	10.22	6.42	121.4	2.17		
1100	0.50	18.53	1.682	10.63	6.40	116.5	3.09		
1105	1.00	18.66	1.660	10.79	6.42	108.7	2.26		
1110	1.25	18.57	1.641	10.33	6.46	104.6	1.67		
1115	1.50	18.56	1.603	11.11	6.50	100.4	2.14		
1120	2.00	18.52	1.583	11.02	6.53	97.7	3.43		
1125	2.50	18.46	1.551	10.70	6.57	95.6	1.73		
1130	2.75	18.52	1.540	10.83	6.59	94.5	2.18		
1135	3.00	18.51	1.520	10.88	6.62	93.5	1.32		
1140	3.50	18.49	1.511	10.90	6.64	93.0	1.25		
1145	3.75	18.43	1.505	10.93	6.67	92.3	1.29		
1146	START	SAMPLE	COLLECTION						
1155	END S	AMPLE	COLLECTION: 7L		IPEC				
				0.5L	IPEC				

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	20071042 93

NOTES AND OBSERVATIONS:

WELL ID: MW 31 - 63

SAMPLE ID: 028

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 40's

PROJECT NO: 01.0017869.92
DATE: 11/03/10
SAMPLER(S): CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

55.8 to 63.8

SAMPLING PORT

63

TOTAL VOLUME PURGED: 0.55 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1050	0	PUMP ON						6/7	29
1100	0.05	15.47	1.218	0.99	7.20	-35.4	2.02		
1105	0.10	15.72	1.129	1.34	7.08	-47.3	1.46		
1110	0.15	15.94	1.139	1.63	7.12	-44.8	1.79		
1115	0.20	16.16	1.108	1.90	7.16	-38.1	0.81		
1120	0.25	16.31	1.092	2.23	7.18	-32.2	0.93		
1125	0.30	16.34	1.086	2.48	7.19	-21.8	0.54		
1130	0.35	16.33	1.082	2.50	7.20	-16.4	0.52		
1135	0.40	16.40	1.088	2.52	7.20	-11.9	0.50		
1138	START SAMPLE COLLECTION								
~~1200~~ 1232	END SAMPLE COLLECTION: 2L IPEC								
				0.5L IPEC					

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070425

NOTES AND OBSERVATIONS:

WELL ID: MW 3 - 8S

SAMPLE ID: 028

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 40'S

PROJECT NO: 01.0017869.92
DATE: 11/03/10
SAMPLER(S): CS, MB

SAMPLING INTERVAL (depth in ft below top of casing)

18.8 to 85.4

SAMPLING PORT

85

TOTAL VOLUME PURGED: 1,100 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1050	0	PUMP ON						6/7	29
1055	0.1	16.29	1.597	1.74	6.63	-65.2	0.73		
1100	0.15	16.67	1.600	2.25	6.66	-70.7	0.41		
1105	0.20	17.05	1.639	3.12	6.71	-55.8	0.30		
1110	0.25	17.17	1.658	3.32	6.74	-54.6	0.27		
1115	0.30	17.31	1.690	3.49	6.77	-48.6	0.27		
1120	0.75	17.32	1.707	3.52	6.79	-42.7	0.27		
1125	0.90	17.31	1.713	3.51	6.78	-40.3	0.27		
1129	START	SAMPLE	COLLECTION						
1200	END SA	MPLE C	OLLECTION	NI 2LI	PEC				
				0.5L I	PEC				

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2.
turbidity meter	20070429 3

NOTES AND OBSERVATIONS:

WELL ID: MW 32 - 85

SAMPLE ID: 025

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 50°F

PROJECT NO: 01.0017869.92
DATE: 11/3/10
SAMPLER(S): CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

79.3 to 92.8

SAMPLING PORT

85

5

TOTAL VOLUME PURGED: 0.75 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1053	0	PUMP ON						8/11	40
1103	0.01	16.66	1.606	1.28	6.64	-114.2	—		
1111	0.05	15.21	1.624	1.20	6.69	-97.8	2.29		
1120	0.15	14.37	1.608	0.85	6.63	-75.7	2.17		
1125	0.20	13.84	1.606	0.83	6.72	-60.6	1.97		
1131	0.25	14.39	1.590	0.78	6.75	-54.7	1.32		
1138	0.30	14.77	1.585	0.65	6.79	-48.4	0.74		
1146	0.40	14.89	1.591	0.57	6.81	-42.0	0.80		
1151	0.44	14.95	1.583	0.56	6.81	-36.0	0.79		
1156	0.48	15.06	1.579	0.55	6.83	-34.7	0.64		
1201	0.54	15.09	1.587	0.52	6.84	-32.9	0.62		
1206	0.60	15.11	1.585	0.52	6.85	-31.6	0.60	↓	↓
1207		PUMP OFF							
1207		START SAMPLE COLLECTION							
1245		SAMPLE COMPLETED ; 2 L IPEC							
1245		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	200701254

NOTES AND OBSERVATIONS:

WELL ID: MW 32 - 59

SAMPLE ID: 022

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 50°F

PROJECT NO: 01.0017869.92
DATE: 11/3/10
SAMPLER(S): CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

28.3 to 61.3

SAMPLING PORT

59 6

TOTAL VOLUME PURGED: 2.65 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
								8/11	40
1103	0.05	17.19	0.460	5.89	6.75	163.2	—		
1111	0.15	17.48	0.422	5.32	6.85	150.4	1.71		
1120	0.55	18.79	0.370	5.17	7.67	141.2	1.38		
1125	0.90	18.79	0.367	5.25	7.83	139.4	1.10		
1131	1.20	18.80	0.366	5.24	7.94	137.2	1.03		
1138	1.50	18.86	0.360	5.26	8.03	134.0	1.12		
1146	2.0	18.87	0.335	5.02	8.15	129.6	0.75		
1151	2.25	18.91	0.333	5.02	8.16	127.9	0.80		
1156	2.50	18.95	0.334	5.08	8.17	127.2	0.77	↓	↓
1156		PUMP OFF							
1157		START SAMPLE COLLECTION							
1208		SAMPLE COMPLETED:				2 L	IPEC		
1208		PUMP OFF				0.5 L	IPEC		

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070 1254

NOTES AND OBSERVATIONS:

WELL ID: MW 32 - 190

SAMPLE ID: 024

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 50° F

PROJECT NO: 01.0017869.92
DATE: 11/3/10
SAMPLER(S): CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

180.3 to 193.9

SAMPLING PORT

190

TOTAL VOLUME PURGED: 1.05 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1356	0	PUMP	ON					10/12	58
1420	0.05	16.70	1.797	1.02	6.68	134.9	—		
1430	0.15	16.34	1.797	0.89	6.84	-143.4	0.80		
1436	0.20	16.46	1.787	0.78	6.92	-150.5	0.58		
1442	0.30	16.55	1.785	0.53	7.01	-148.6	0.26		
1456	0.50	16.61	1.790	0.34	7.09	-133.9	0.14		
1502	0.60	16.57	1.790	0.32	7.10	-131.7	0.13		
1511	0.80	16.67	1.783	0.26	7.10	-129.0	0.12		
1520	0.90	16.65	1.786	0.25	7.11	-124.0	0.11		
1525	START	SAMPLE	COLLECTION						
1607	END SAMPLE	COLLECTION: 2L			IPEC				
				0.5L	IPEC				

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	2007012154

NOTES AND OBSERVATIONS:

WELL ID: MW 32-173

SAMPLE ID: 020

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 50° F

PROJECT NO: 01.0017869.92
DATE: 11/3/10
SAMPLER(S): CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

165.8 to 174.3

SAMPLING PORT

173 2

TOTAL VOLUME PURGED: 1.20 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1356	0	PUMP ON						10 | 12	58
1420	0.10	16.97	1.992	0.83	6.59	-158.3	—		
1430	0.30	17.01	2.010	0.42	6.61	-150.4	1.85		
1436	0.40	17.10	2.028	0.30	6.57	-135.4	1.31		
1442	0.50	17.18	2.036	0.28	6.73	-128.2	0.98		
1456	0.80	17.12	2.043	0.18	6.89	-107.8	0.85		
1502	0.90	17.05	2.044	0.17	6.91	-109.1	0.81		
1511	1.05	17.09	2.046	0.15	6.90	-104.4	0.78		
1519	START SAMPLE COLLECTION								
1553	END SAMPLE COLLECTION: 2L TPEC, 0.5L TPEC								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070125L

NOTES AND OBSERVATIONS:

WELL ID: MW 32 - 149

SAMPLE ID: 022

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 50°F

PROJECT NO: 01.0017869.92
DATE: 11/3/10
SAMPLER(S): CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

147.3 to 156.8

SAMPLING PORT

149

3

TOTAL VOLUME PURGED: 1.10 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1356	0	PUMP ON						10/12	58
1420	0.10	15.59	2.094	2.08	6.50	-122.3	—		
1430	0.15	16.12	2.125	0.64	6.59	-139.0	1.67		
1436	0.18	16.23	2.153	0.42	6.67	-143.3	1.43		
1442	0.20	16.41	2.173	0.29	6.76	-139.6	0.61		
1456	0.45	16.54	2.212	0.22	6.87	-130.3	0.44		
1502	0.55	16.48	2.215	0.19	6.89	-126.2	0.41		
1511	0.70	16.54	2.225	0.20	6.90	-117.4	0.39		
1520	0.85	16.63	2.224	0.19	6.91	-112.3	0.38		
1528	0.95	16.63	2.224	0.21	6.93	-109.3	0.37		
1532	START SAMPLE COLLECTION								
1609	END SAMPLE COLLECTION: 2L IPEC			+ 0.5L IPEC					

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	2007011254

NOTES AND OBSERVATIONS:

WELL ID: MW-63-18
SAMPLE ID: 015

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, MID-40's

PROJECT NO: 01.0017869.92
DATE: 11/02/10
SAMPLER(S): CB, MB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 11.13 Transducer Actual Depth 6.231

Time	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	Notes
									gal
1037	6.077	PUMP ON							0
1124	5.889	16.36	1.967	3.68	6.85	-106.0	16.62		0.01
1134	5.889	16.49	2.759	1.05	6.82	-132.6	16.96		0.08
1142	5.889	16.92	2.220	0.91	6.84	-127.7	10.85		0.11

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
flow meter	1
turbidity meter	2007M254

NOTES AND OBSERVATIONS: Total volume purged _____ gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

PURGING AS SLOW AS POSSIBLE, THOUGH WATER LEVEL KEEPS DROPPING GREATER THAN 0.3'. SWITCHED PURGE METHOD TO MODIFIED TRADITIONAL AT 11:58

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-63 18
SAMPLE ID: 015

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, MID 40'S

PROJECT NO: 01.0017869.92
DATE: 11/2/10
SAMPLER(S): CB, MB

WATER COLUMN HEIGHT (ft)

18 (DTB) - 11.13 (DTW) = 6.87 (Water Column Height) ft

Well Diameter: 1 in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 6.87 x 0.041 (Multiplier) = 0.28 (Well Volume) gal

0.28 x 1.5 = 0.42 (Designed Purge Volume) gal

TOTAL VOLUME PURGED: 0.75 gal

WATER QUALITY: DTW = Transducer Actual Depth

Time	Volume Purged (gal)	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Notes
1202	0.22	5.264	17.34	2.097	0.96	6.85	-122.6	8.13	
1208	0.30	5.131	18.17	2.060	0.66	6.88	-134.8	5.22	
1212	0.45	5.108	18.90	1.975	0.65	6.91	-141.0	4.58	
1215	START SAMPLE COLLECTION								
1222	END	SAMPLE COLLECTION							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	12070125

NOTES AND OBSERVATIONS:

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-63-34
SAMPLE ID: 015

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, MID-40's

PROJECT NO: 01.0017869.92
DATE: 11/02/10
SAMPLER(S): CB, MB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 11.14 Transducer Actual Depth 13.554

Time	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	Notes
1032	13.481	PUMP ON							
1124	13.057	16.38	1.361	7.67	7.30	10.16	0.62		0.01
1134	12.990	16.36	1.355	5.78	7.28	-4.0	4.76		0.02
1142	12.929	16.30	1.361	5.27	7.30	-4.3	5.20		0.60

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
flow meter	3
turbidity meter	20070 1254

NOTES AND OBSERVATIONS: Total volume purged _____ gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

PURGING AS SLOW AS POSSIBLE, THOUGH WATER LEVEL KEEPS DROPPING GREATER THAN 0.3'. SWITCHED PURGE METHOD TO MODIFIED TRADITIONAL AT 11:58

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-63-34
SAMPLE ID: 015

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, MID -40's

PROJECT NO: 01.0017869.92
DATE: 11/2/10
SAMPLER(S): CB, MB

WATER COLUMN HEIGHT (ft)

34 (DTB) − 11.14 (DTW) = 22.86 ft (Water Column Height)

Well Diameter: 1 in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 22.86 x 0.041 (Multiplier) = 0.937 gal (Well Volume)

0.937 x 1.5 = 1.41 gal (Designed Purge Volume)

TOTAL VOLUME PURGED: 1.50 gal

WATER QUALITY: DTW = Transducer Actual Depth

Time	Volume Purged (gal)	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Notes
1202	~~12.765~~ 0.0	12.768	17.33	1.359	5.59	7.30	2.0	5.56	
1208	0.12	12.715	17.16	1.356	4.37	7.30	-14.5	5.76	
1212	0.14	12.688	17.31	1.352	3.80	7.29	-45.0	—	
1229	0.30	12.492	17.44	1.353	2.90	7.32	-75.9	1.06	
1236	0.70	12.430	17.01	1.360	0.61	7.37	-121.2	1.03	
1241	0.85	12.395	17.44	1.356	0.35	7.39	-142.6	0.23	
1244	1.0	12.369	17.37	1.358	0.28	7.40	-147.3	0.27	
1247	1.2	12.345	17.44	1.360	0.23	7.41	-150.4	0.15	
1250	1.35	12.319	17.46	1.358	0.22	7.42	-152.5	0.12	
1252		START SAMPLE COLLECTION							
1304		SAMPLE COMPLETED : 2 L IPEC							
		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	B
turbidity meter	20070125 4

NOTES AND OBSERVATIONS:

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW 63 - 174

SAMPLE ID: 015

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 40's

PROJECT NO: 01.0017869.92
DATE: 11/2/10
SAMPLER(S): CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

168.0 to 191.1

SAMPLING PORT

174

TOTAL VOLUME PURGED: 2.25 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1024	0		PUMP	ON				8/8.2	35
1031	0.05	16.46	0.997	1.07	5.79	-119.1	—		
1036	0.20	16.38	0.999	0.76	5.76	-119.9			
1043	0.40	16.43	0.996	0.48	5.84	-103.6	1.51		
1050	0.60	16.32	1.000	0.40	6.07	-88.1			
1100	1.10	16.09	1.002	0.32	6.39	-75.9	0.61		
1110	1.50	16.29	1.000	0.28	6.44	-78.6	0.40		
1118	1.70	16.31	1.001	0.27	6.47	-79.9	0.25		
1123	1.80	16.33	1.000	0.25	6.49	-81.8	0.23		
1129	2.1	16.38	1.002	0.23	6.54	-83.2	0.22		
1130		PUMP OFF, START SAMPLE COLLECTION							
1150		SAMPLE COMPLETED : 2 L IPEC							
1150		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	20070429 3

NOTES AND OBSERVATIONS:

WELL ID: MW 63 - 163

SAMPLE ID: 015

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY 40's

PROJECT NO: 01.0017869.92
DATE: 11/2/10
SAMPLER(S): CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

150.5 to 165

SAMPLING PORT

163 2

TOTAL VOLUME PURGED: 2.15 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1024	0	PUMP ON						8/8.2	35
1031	0.1	16.45	0.992	0.85	6.56	-164.9	—	↓	↓
1036	0.25	16.30	0.982	0.72	6.79	-150.1			
1043	0.45	16.32	0.969	0.53	7.04	-142.7	0.38		
1050	0.65	16.13	0.966	0.45	6.95	-131.4	0.44		
1100	1.10	15.97	0.970	0.31	6.96	-113.7	0.80		
1110	1.40	16.20	0.973	0.28	7.01	-110.5	0.45		
1118	1.60	16.29	0.976	0.25	7.04	-108.7	0.		
1123	1.80	16.35	0.976	0.23	7.04	-106.5			
1129	2.0	16.39	0.974	0.22	7.04	-103.2		↓	↓
1131		PUMP OFF, START SAMPLE COLLECTION							
1149		SAMPLE COMPLETED : 2 L IPEC							
1149		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	
turbidity meter	20070429 3

NOTES AND OBSERVATIONS:

WELL ID: MW 63 - 121

SAMPLE ID: 015

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 40's

PROJECT NO: 01.0017869.92
DATE: 11/2/10
SAMPLER(S): CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

118 to 127.5

SAMPLING PORT

121 3

TOTAL VOLUME PURGED: 2.70 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1024	0	PUMP	ON					8/8.2	35
1031	0.1	16.44	1.441	0.75	7.26	-68.3	—		
1036	0.3	16.30	1.433	0.60	7.34	-73.6			
1043	0.55	16.41	1.427	0.43	7.38	-70.4	0.68		
1050	0.80	16.17	1.429	0.41	7.39	-67.2			
1100	1.40	16.35	1.415	0.37	7.39	-67.4	0.57		
1110	2.0	16.24	1.418	0.41	7.39	-70.9	0.29		
1118	2.2	16.19	1.414	0.38	7.39	-72.3	0.35		
1123	2.4	16.24	1.409	0.37	7.39	-74.7	0.33		
1129	2.55	16.26	1.410	0.36	7.39	-76.7	0.37		
1132		PUMP OFF, START SAMPLE COLLECTION							
1146		SAMPLE COMPLETED : 2 L IPEC							
1146		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070493

NOTES AND OBSERVATIONS:

WELL ID: MW 63 - 112

SAMPLE ID: 015

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, MID-40's

PROJECT NO: 01.0017869.92
DATE: 11/02/10
SAMPLER(S): CB, MR

SAMPLING INTERVAL (depth in ft below top of casing)

106.5 to 112.0

SAMPLING PORT

112 4

TOTAL VOLUME PURGED: 1.05 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1348	0	PUMP	ON					7/7.4	20
1356	0.02	17.52	1.327	1.77	7.17	-105.9	0.72		
1405	0.20	17.01	1.281	0.50	7.32	-104.4	0.44		
1410	0.30	16.90	1.300	0.40	7.35	-95.9	0.19		
1415	0.40	17.02	1.310	0.36	7.36	-89.9	0.33		
1420	0.50	17.13	1.311	0.31	7.37	-83.9	0.31		
1425	0.60	17.03	1.313	0.29	7.38	-77.9	0.36		
1430	0.70	17.08	1.310	0.26	7.38	-73.6	0.35		
1435	0.80	17.05	1.310	0.27	7.38	-69.9	0.34	↓	↓
1439	START SAMPLE COLLECTION								
1505	END SAMPLE COLLECTION: 2L IPEC								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	10070493

NOTES AND OBSERVATIONS:

WELL ID: MW 63 - 93

SAMPLE ID: 016

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, MID 40's

PROJECT NO: 01.0017869.92
DATE: 11/02/10
SAMPLER(S): CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

81.5 to 100.5

SAMPLING PORT

5U 5

TOTAL VOLUME PURGED: 1.10 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1348	0							7/7.4	20
1350	0.02	17.37	0.949	1.43	6.00	-83.6	0.69	↓	↓
1405	0.10	16.88	1.011	0.55	5.92	-97.2	0.43		
1410	0.20	16.73	1.020	0.43	5.95	-95.2	0.42		
1415	0.40	16.81	1.023	0.36	6.06	-75.1	0.58		
1420	0.50	16.85	1.019	0.31	6.11	-61.0	0.46		
1425	0.60	16.83	0.993	0.29	6.19	-52.9	0.36		
1430	0.70	16.83	0.961	0.27	6.26	-47.4	0.26		
1435	0.80	16.80	0.928	0.26	6.34	-48.8	0.24		
1440	0.90	16.83	0.904	0.24	6.35	-46.6	0.22	↓	↓
1445	START SAMPLE COLLECTION								
1508	END SAMPLE COLLECTION: 2 L TPC								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	10E704243

NOTES AND OBSERVATIONS:

WELL ID: MW 63 - 50

SAMPLE ID: 015

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, MID 40's

PROJECT NO: 01.0017869.92
DATE: 11/02/10
SAMPLER(S): CB, MB

SAMPLING INTERVAL (depth in ft below top of casing)

41.5 to 58.0

SAMPLING PORT

5D 7

TOTAL VOLUME PURGED: 2.40 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1348	0							7/7.4	2.
1352	0.05	17.00	1.103	8.41	10.90	-7.1	—		
1356	0.10	16.94	1.157	3.31	10.99	-8.5	1.23		
1405	0.20	16.80	1.155	1.62	7.12	-20.0	0.89		
1410	0.30	16.78	1.158	1.28	7.16	-18.1	0.83		
1415	0.75	16.85	1.161	1.08	7.19	-20.0	0.61		
1420	1.00	16.84	1.163	1.02	7.22	-22.1	0.31		
1425	1.25	16.84	1.165	1.00	7.23	-25.3	0.65		
1430	1.50	16.81	1.167	0.96	7.25	-27.2	0.51		
1435	1.75	16.80	1.170	0.99	7.26	-30.6	0.16		
1440	2.00	16.70	1.174	1.05	7.28	-28.1	0.36		
1445	2.15	16.72	1.179	0.99	7.28	-28.10	0.39		
1450	2.40	16.71	1.181	0.97	7.29	-28.9	0.37	↓	↓
1452	START SAMPLE COLLECTION								
1507	END SAMPLE COLLECTION: 2L IPEC								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070429 3

NOTES AND OBSERVATIONS:

WELL ID: MW-55-24
SAMPLE ID: 016

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: windy, sunny, 40s

PROJECT NO: 01.0017869.92
DATE: 11/6/10
SAMPLER(S): CS, MB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 10.50 Transducer Actual Depth 5.365

Time	DTW or (Actual Depth)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	Notes gal
11:11	5.350	PUMP ON							
1130	5.263	10.44	0.516	3.17	7.74	-69.3	—		0.01
1140	5.234	10.03	0.529	3.17	7.76	-78.1	1.45		0.04
1150	5.151	10.18	0.541	2.22	7.79	-86.6	0.99		0.07
1200	5.211	10.40	0.531	1.83	7.82	-101.0	0.81		0.10
1205	5.191	10.44	0.531	1.78	7.82	-93.4	0.48		0.15
1210	5.240	10.45	0.533	1.82	7.83	-94.6	0.39		0.20
1215	5.285	10.42	0.540	1.71	7.83	-91.2	0.26		0.25
1220	5.255	10.39	0.542	1.68	7.83	-91.6	0.13		0.30
1225	5.255	10.31	0.541	1.63	7.84	-85.2	0.10		0.40
1230	5.255	10.32	0.540	1.60	7.84	-84.2	0.12		0.50
1234	START SAMPLE COLLECTION								
1410	END SAMPLE COLLECTION: 2L IPEC								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
flow meter	2
turbidity meter	22J104293

NOTES AND OBSERVATIONS: Total volume purged 0.60 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-55-35
SAMPLE ID: 015

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: WINDY, SUNNY, 40's

PROJECT NO: 01.0017869.92
DATE: 11/01/10
SAMPLER(S): CB, MB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 10.87 Transducer Actual Depth 21.101

Time	DTW or (Actual Depth)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	Notes gal
11:11	21.091	PUMP ON							0
1150	20.960	11.23	0.576	2.41	6.93	-110.9	4.18		0.01
1200	20.978	11.88	0.566	1.39	7.10	-127.1	2.07		0.05
1205	20.952	12.13	0.562	1.40	7.18	-138.7	2.24		0.07
1210	21.001	12.15	0.558	0.93	7.23	-150.3	1.81		0.10
1215	20.964	12.14	0.554	0.91	7.30	-141.0	1.12		0.25
1220	20.961	12.28	0.551	0.86	7.38	-141.2	1.05		0.35
1225	20.964	12.35	0.549	0.80	7.42	-151.3	0.71		0.45
1230	20.966	12.45	0.551	0.81	7.48	-157.4	0.76		0.50
1235	20.975	12.58	0.554	0.76	7.49	-157.7	0.66		0.55
1240	20.971	12.69	0.558	0.70	7.51	-157.3	0.68		0.60
1245	20.969	12.75	0.560	0.68	7.52	-158.0	0.65		0.65
1250	20.958	12.78	0.562	0.66	7.53	-158.7	0.62		0.70
1254	START SAMPLE COLLECTION								
1426	SAMPLE COMPLETED : 2 L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
flow meter	1
turbidity meter	10704293

NOTES AND OBSERVATIONS: Total volume purged 0.75 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-55-54
SAMPLE ID: 011e

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: WINDY, SUNNY, 40's

PROJECT NO: 01.0017869.92
DATE: 11/01/10
SAMPLER(S): CB, MB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 10.65 Transducer Actual Depth 38.771

Time	(DTW) or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	Notes
11:11	10.65	PUMP ON							gal
1130	10.69	9.70	1.795	5.26	6.08	248.0	—		0.05
1140	10.69	9.88	1.795	4.61	6.09	240.3	0.56		0.09
1150	10.69	10.13	1.790	4.32	6.14	241.4	0.51		0.15
1200	10.70	10.30	1.788	4.12	6.21	231.2	0.58		0.25
1205	10.70	10.49	1.786	4.01	6.24	225.8	0.20		0.30
1210	10.70	10.63	1.786	3.89	6.28	220.4	0.05		0.40
1215	10.71	10.72	1.790	3.88	6.33	213.4	0.00		0.50
1220	10.71	10.36	1.788	3.87	6.35	208.9	0.00		0.60
1225	10.71	10.34	1.787	3.85	6.37	205.1	0.00		0.70
1232	START	SAMPLE COLLECTION							
1336	END SAMPLE	COLLECTION @ IPEC							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
flow meter	4
turbidity meter	20070429

NOTES AND OBSERVATIONS: Total volume purged 0.70 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-111
SAMPLE ID: 035

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: M, Sunny 40's

PROJECT NO: 01.0017869.92
DATE: 11/1/10
SAMPLER(S): CB, MB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 9.18 Transducer Actual Depth - 6556 Transd. read - 9.465

Time	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	Purged Notes H_2O (gal)
1143	6.544		0	PUMP	ON				
1200	6.404	8.88	0.357	11.63	6.88	-58.2	—	0.35	
1209	6.359	10.08	0.811	3.93	6.82	-39.7	0.91		
1219	6.376	11.38	0.808	2.71	6.82	-32.8	1.16		0.10
1230	6.450	11.70	0.812	2.59	6.98	-14.7	1.45		0.15
1237	6.456	12.11	0.819	2.31	6.99	-13.4	1.50		0.18
1246	6.464	11.97	0.819	2.31	6.93	-8.9	1.40		0.20
1252	6.501	12.51	0.825	2.21	6.99	-8.8	1.51		
1257	6.495	12.48	0.824	1.99	6.99	-8.0	1.42		
1305	6.474	12.56	0.825	2.06	7.02	-7.8	1.47		0.25
1310	6.463	12.49	0.829	2.02	6.96	-8.0	1.50	↓	0.28
1312		START SAMPLE COLLECTION							
1455		SAMPLE COMPLETED : 2 L IPEC							
1455		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	\
flow meter	4
turbidity meter	20070l254

NOTES AND OBSERVATIONS: Total volume purged 0.4 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: U3-4S
SAMPLE ID: 002

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy 50's windy

PROJECT NO: 01.0017869.92
DATE: 10/29/10
SAMPLER(S): MB, CB
PUMP DEPTH: 15.0 ft

WATER QUALITY: DTW = 10.18 Transducer Actual Depth – NO TRANSDUCER.

Time	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	Purged H_2O (gal) Notes
0928	10.18								
0938	10.18	13.76	0.672	4.78	7.06	137.8	—	0.5	0.01
0945	10.18	13.96	1.276	3.26	7.02	45.5	—		0.02
0950	10.18	13.96	1.281	2.20	7.08	90.3	12.47		0.03
0955	10.18	14.39	1.281	1.92	7.14	36.8	12.18		0.07
1003	10.18	14.28	1.285	2.00	7.21	45.0	12.30		0.12
1013	10.18	13.30	1.292	1.35	7.23	43.7	12.43		0.20
1018	10.18	13.20	1.290	1.31	7.25	43.1	12.37		0.25
1023	10.18	13.18	1.292	1.30	7.25	44.5	12.33		0.30
1028	10.18	13.14	1.293	1.29	7.25	46.2	12.40	↓	0.34
1029		Start sample collection							
1140		Sample completed: 2 L IPEC							
						0.5 L IPEC			
1140		Pump off							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
flow meter	3
turbidity meter	200704293

NOTES AND OBSERVATIONS: Total volume purged _____ gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-71
SAMPLE ID: 030

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: OVERCAST, 50's

PROJECT NO: 01.0017869.92
DATE: 10/29/10
SAMPLER(S): CB/MB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = Transducer Actual Depth

Time	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	Notes
									gal
1450	2.348	PUMP ON							
1507	2.356	20.52	0.989	4.79	7.62	192.8	0.32		0.01
1515	2.359	20.91	0.988	2.80	7.73	184.2	0.32		0.15
1520	2.362	21.14	0.987	2.29	7.75	179.7	0.32		0.25
1525	2.364	21.26	0.987	1.83	7.76	175.1	0.32		0.35
1530	2.366	21.27	0.987	1.80	7.77	171.7	0.21		0.45
1535	2.368	21.28	0.987	1.79	7.77	167.9	0.20		0.55
1536	START SAMPLE COLLECTION								
1604	END SAMPLE COLLECTION!				2L TPFC				
					0.5 LTPFC				

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
flow meter	1
turbidity meter	240701254

NOTES AND OBSERVATIONS: Total volume purged 0.70 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-72
SAMPLE ID: 035

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: OVERCAST, SD'S

PROJECT NO: 01.0017869.92
DATE: 10/29/10
SAMPLER(S): CB, MB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 4.65 Transducer Actual Depth 2.149

Time	DTW or (Actual Depth)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	Notes gal
0918	2.138	Pump	ON						
0934	2.119	23.75	1.450	4.03	7.73	90.0	3.24	<1.0	0.01
0944	2.121	24.27	1.452	4.52	7.74	-72.8	2.74		0.09
0954	2.121	24.51	1.446	3.14	7.76	-89.9	3.20		0.15
1000	2.121	24.60	1.448	3.09	7.76	-89.8	3.15		0.20
1005	2.119	24.59	1.448	3.02	7.76	-99.6	3.22		0.25
1010	2.117	24.61	1.447	2.73	7.76	-108.2	3.15		0.30
1015	2.118	24.67	1.446	2.55	7.76	-102.1	3.45		0.35
1020	2.115	24.67	1.446	2.52	7.76	-90.8	3.44		0.40
1025	2.116	24.67	1.446	2.49	7.76	-88.0	3.43		0.45
1030	2.117	24.67	1.446	2.47	7.76	-85.5	3.42		0.50
1031	START SAMPLE COLLECTION								
1127	END SAMPLE COLLECTION: 2L IPEC								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
flow meter	1
turbidity meter	20070125 4

NOTES AND OBSERVATIONS: Total volume purged 0.65 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: 43-4D
SAMPLE ID: 026

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sun + clouds 70°F

PROJECT NO: 01.0017869.92
DATE: 10/28/10
SAMPLER(S): CB, MB

WATER COLUMN HEIGHT (ft)

27.25 (DTB) - 10.72 (DTW) = 16.53 (Water Column Height) ft

Well Diameter: 4 in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 16.53 x 0.653 (Multiplier) = 10.79 (Well Volume) gal

10.79 x 1.5 = 16.19 (Designed Purge Volume) gal

TOTAL VOLUME PURGED: 8.85 gal

WATER QUALITY: DTW = 10.72 Transducer Actual Depth = 50.288 Transd. Read. = 3.789

Time	Volume Purged (gal)	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Notes
1149	0		PUMP ON						
1156	.7+.5	47.943	33.77	1.620	1.70	8.08	96.7	—	
1205	1.5+1.2	45.574	33.93	1.537	2.51	8.55	33.4	0.79	
1210	1.9+1.6	44.296	33.48	1.514	2.93	8.63	9.9	0.71	
1217	2.3+2.0	42.570	33.29	1.504	3.11	8.69	-8.7	0.63	
1225	2.7+2.6	40.609	33.20	1.500	3.31	8.71	-20.3	0.76	
1232	3.2+3.0	38.896	33.05	1.496	3.45	8.72	-25.8	0.74	
1235	3.5+3.2	38.375	33.02	1.496	3.44	8.72	-26.3	0.72	
1244	3.9+3.7	36.189	32.48	1.501	3.43	8.71	-28.2	0.50	
1247	4.0+3.8	35.771	32.53	1.503	3.20	8.70	-28.4		
1254	4.0+4.3	34.701	32.71	1.502	3.45	8.71	-29.7	0.72	
1301	4.0+4.7	34.182	PUMP OFF		Well	dry - let well recharge.			
1341		START	SAMPLE COLLECTION						
1404		SAMPLE	COMPLETED		: 2	L IPEC			
					0.5	L IPEC in house analysis			
1404		PUMP	OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070429 3

NOTES AND OBSERVATIONS:

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-46
SAMPLE ID: 022

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 70's

PROJECT NO: 01.0017869.92
DATE: 10/28/10
SAMPLER(S): CB

WATER COLUMN HEIGHT (ft)

29.7 (DTB) − 4.07 (DTW) = 25.63 (Water Column Height) ft

Well Diameter: 4 in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 25.63 x 0.653 (Multiplier) = 16.74 (Well Volume) gal

16.74 x 1.5 = 25.10 (Designed Purge Volume) gal

TOTAL VOLUME PURGED: 25.5 gal

WATER QUALITY: DTW = 4.07 Transducer Actual Depth

Time	Volume Purged (gal)	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Notes
1112	0	23.777	PUMP ON						
1124	2.5	20.710	21.10	0.754	0.86	7.50	-74.0	20.39	
1134	5.25	18.647	21.20	0.740	0.37	7.51	-54.4	30.50	
1145	8.0	15.636	21.19	0.653	0.41	7.55	-42.3	39.13	
1200	12.5	9.910	21.25	0.532	0.64	7.63	-64.2	34.31	
1212	15.0	7.308	21.23	0.767	2.03	7.65	-69.1	27.82	
1225	18.25	7.308	21.17	1.003	3.71	7.68	-86.7	20.73	
1233	20.0	1.976	21.12	1.084	4.49	7.70	-85.4	15.19	
1258	23.0	1.975	21.10	1.271	5.54	7.69	-95.6	6.65	
1315	25.0	2.440	21.10	1.305	5.55	7.67	-94.0	10.97	
1316	START SAMPLE COLLECTION								
1325	END SAMPLE COLLECTION: 2L FPEC				0.5L FPEC				

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070125 4

NOTES AND OBSERVATIONS:

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-42-49
SAMPLE ID: 023

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: RAIN, MID-60'S

PROJECT NO: 01.0017869.92
DATE: 10/27/10
SAMPLER(S): CB, MB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = ~~30~~ 34.81 Transducer Actual Depth 13.584

Time	DTW or (Actual Depth)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Notes
1125	13.591	PUMP ON						5/10	25	
1130	13.082	18.11	1.362	7.21	6.48	152.4	2.00			0.01
1140	12.735	18.03	1.400	6.02	6.39	128.7	0.93		↓	0.75
1145	12.768	18.15	1.392	5.87	6.46	119.1	0.59		22	1.00
1150	12.810	18.26	1.388	5.77	6.54	109.7	0.21			1.25
1155	12.811	18.20	1.378	5.78	6.62	101.9	0.20			1.50
1200	12.824	18.24	1.356	5.84	6.67	96.7	0.20			1.75
1205	12.828	18.28	1.336	5.83	6.73	91.0	0.20			1.85
1208	START SAMPLE COLLECTION									
1223	END SAMPLE COLLECTION: 2L IPEC									
				0.5L IPEC						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	200701254

NOTES AND OBSERVATIONS: Total volume purged 2.0 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-42-78
SAMPLE ID: 018

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: RAIN, MID-60's

PROJECT NO: 01.0017869.92
DATE: 10/27/10
SAMPLER(S): CB, MB

WATER COLUMN HEIGHT (ft)

78 (DTB) − 33.87 (DTW) = 44.13 ft (Water Column Height)

Well Diameter: ~~Dental~~ in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 44.13 x 0.041 (Multiplier) = 1.81 (Well Volume) gal

1.81 x 1.5 = 2.71 gal (Designed Purge Volume)

TOTAL VOLUME PURGED: 3.0 gal

WATER QUALITY: DTW = 33.87 Transducer Actual Depth

Time	Volume Purged (gal)	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Notes
1325		—	Pump ON						
1330	0.01	—	18.93	1.957	8.99	10.86	204.2	960.8	
1334	0.40	—	17.90	1.983	6.91	6.47	191.2	410.8	
1337	0.80	—	17.59	1.975	5.99	6.36	184.0	438.7	
1340	1.20	—	17.58	1.966	5.35	6.34	176.4	373.0	
1343	1.600	—	17.44	1.959	4.93	6.35	169.0	308.4	
1346	2.00	—	17.41	1.954	4.55	6.36	162.4	240.8	
1349	2.40	—	17.43	1.947	4.28	6.39	155.2	200.7	
1351	2.70	—	17.41	1.946	4.17	6.41	150.8	170.5	
1352		START SAMPLE COLLECTION							
1356		END SAMPLE COLLECTION: 2L IPEC							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	20070254

NOTES AND OBSERVATIONS:

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-53-82
SAMPLE ID: 017

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Showers 70°F

PROJECT NO: 01.0017869.92
DATE: 10/27/10
SAMPLER(S): CB, MB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 60.25 Transducer Actual Depth 21.587 Transd read - 9.951

Time	DTW or (Actual Depth)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	H_2O purged Notes (gal)
1001	21.587									
1039	21.499		PUMP	ON				5/16	40	
1045	21.317	19.35	1.863	2.69	6.09	155.3	—	5/20	38	0.01
1050	21.355	19.50	1.740	4.15	6.50	181.0	56.14			
1055	21.361	19.60	1.643	5.30	6.75	176.5	26.88			
1100	21.397	19.62	1.614	5.65	7.04	176.1	19.29			0.20
1105	21.415	19.68	1.598	5.74	7.25	175.2	18.49			0.30
1112	21.381	19.61	1.608	5.91	7.50	175.1	12.26			0.45
1119	21.395	19.55	1.635	5.90	7.66	175.0	10.46			0.55
1128	21.384	19.61	1.670	5.90	7.71	175.2	6.20			0.70
1134	21.388	19.64	1.689	5.91	7.74	175.5	5.97			0.85
1139	21.366	19.62	1.705	5.86	7.77	175.7	5.89			0.95
1141		START SAMPLE COLLECTION								
1207		SAMPLE COMPLETED : 2 L						IPEC		
1207		PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20070 4293

NOTES AND OBSERVATIONS: Total volume purged _____ gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-53-120
SAMPLE ID: 021

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Showers 70°F

PROJECT NO: 01.0017869.92
DATE: 10/27/10
SAMPLER(S): CB, MB

WATER COLUMN HEIGHT (ft)

120 (DTB) − 60.87 (DTW) = 59.13 ft (Water Column Height)

Well Diameter: _____ in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 59.13 x 0.041 (Multiplier) = 2.42 (Well Volume) gal

2.42 x 15 = 3.64 gal (Designed Purge Volume)

TOTAL VOLUME PURGED: _____ gal

WATER QUALITY: DTW = Transducer Actual Depth

Time	Volume Purged (gal)	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Notes
1207	0		PUMP ON						
1212	0.01	—	18.99	1.441	6.84	—	192.1	30.19	
1215	0.20	—	18.52	1.448	4.85	—	196.0	60.38	
1220	0.75	—	18.38	1.519	4.01	—	199.1	143.3	
1226	1.50	—	18.30	1.572	3.53		200.2	148.7	
1230	2.00	—	18.19	1.585	3.74	—	201.3	126.1	
1234	2.50	—	18.10	1.593	3.36	—	201.3	114.5	
1238	3.00	—	18.10	1.597	2.31	—	201.5	93.09	
1241	3.50	—	18.11	1.596	2.48	—	202.1	93.10	
1243	3.75	—	18.09	1.596	2.24	—	202.0	93.06	
1243			START SAMPLE COLLECTION						
1248			SAMPLE COMPLETED:				2	L	IPEC
1248			PUMP OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20070 4293

NOTES AND OBSERVATIONS:

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-44-66
SAMPLE ID: 018

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: M. sunny 70's

PROJECT NO: 01.0017869.92
DATE: 10/26/10
SAMPLER(S): CB, MB

WATER COLUMN HEIGHT (ft)

66 (DTB) − 59.44 (DTW) = 6.56 (Water Column Height)

Well Diameter: _____ in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 6.56 x 0.163 (Multiplier) = 1.069 (Well Volume) gal

1.069 x 1.5 = 1.61 (Designed Purge Volume) gal

TOTAL VOLUME PURGED: _____ gal

WATER QUALITY: DTW = Transducer Actual Depth

Time	Volume Purged (gal)	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Notes
0941	0	5.228		PUMP	ON				10/15	88	
0943	0.1	4.466	18.30	1.648	2.89	6.82	53.9	—	10/15	38	
0947	0.2	3.988	18.16	1.615	4.24	6.91	39.9	50.09			
0952	0.4	2.955	17.75	1.595	5.61	7.06	34.2	42.97			
0955	0.5	2.596	17.67	1.589	5.96	7.10	34.8	38.31			
0958	0.65	2.108	17.70	1.586	6.36	7.15	36.7	52.01			
1000	0.80	1.790	17.64	1.588	6.58	7.19	40.0	47.89			
1004	1.0	1.792	17.96	1.591	6.43	7.24	44.7	49.61			
1010	1.2	1.792	18.22	1.600	6.17	7.25	45.4	51.06			
1014	1.35	1.790	18.74	1.602	5.82	7.27	44.5	53.10			
1018	1.40	1.790	18.92	1.606	5.65	7.27	43.7	48.29			
1025	1.45	1.790	19.17	1.610	5.54	7.27	43.2	47.49			
1027		Well	dry.	Let	recharge	before	sampling				
1420			START	SAMPLE	COLLECTION						
1446			END	SAMPLE	COLLECTION.		2L IPEC				
							0.5L IPEC				

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070125 4

NOTES AND OBSERVATIONS:

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-44-102
SAMPLE ID: 019

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: M. Sunny 70's

PROJECT NO: 01.0017869.92
DATE: 10/26/10
SAMPLER(S): CB, MB

WATER COLUMN HEIGHT (ft)

~~93.09~~ 102 (DTB) − 68.16 (DTW) = ~~24.93~~ 33.84 ft (Water Column Height)

Well Diameter: 0.041 in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 33.84 x 0.041 (Multiplier) = 1.387 (Well Volume) gal

1.387 x 1.5 = 2.08 gal (Designed Purge Volume)

TOTAL VOLUME PURGED: gal

WATER QUALITY: DTW = 68.16 Transducer Actual Depth

Time	Volume Purged (gal)	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Notes
1312	0	68.16	PUMP ON						
1315	0.25	—	19.78	1.257	9.50	7.63	116.9	978.4	
1320	0.75	—	18.97	1.313	6.36	7.43	98.5	1100.0	TURB>1100, SLIGHTLY
1323	1.25	—	18.44	1.294	6.41	7.41	85.1	—	
1325	1.50	—	18.07	1.293	6.72	7.40	84.6	—	
1326	1.75	—	18.38	1.293	7.27	7.40	83.0	—	
1328	2.00	—	18.20	1.302	7.27	7.56	101.3	—	
1329	START SAMPLE COLLECTION								
1332	END SAMPLE COLLECTION:				2L IPEC				
					0.5L IPEC				

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	2007 n4293

NOTES AND OBSERVATIONS:

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-41-40
SAMPLE ID: 018

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: PARTLY CLOUDY, 60's

PROJECT NO: 01.0017869.92
DATE: 10/25/10
SAMPLER(S): CB, MB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 23.11 Transducer Actual Depth 51.230

Time	DTW or (Actual Depth)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Flow Rate (gal/hr)	Notes
1325	51.230	PUMP ON							
1345	51.025	20.73	2.602	4.30	7.00	114.5	1.89		0.05
1355	51.062	20.71	2.574	4.25	7.06	111.4	1.27		0.10
1400	51.064	20.70	2.563	4.21	7.08	111.2	0.96		0.13
1405	51.071	20.68	2.553	4.22	7.10	110.8	1.32		0.18
1410	51.060	20.69	2.545	4.18	7.10	111.0	1.23		0.22
1415	51.060	20.70	2.530	4.28	7.11	110.6	0.98		0.26
1420	51.055	20.83	2.525	4.14	7.12	110.2	0.86		0.30
1425	51.051	20.92	2.522	4.21	7.12	110.1	0.72		0.34
1430	51.047	21.02	2.520	4.16	7.13	110.2	0.68		0.38
1435	51.047	21.01	5.520	4.18	7.13	110.4	0.67		0.42
1438	START	SAMPLE COLLECTION							
1606	END SA	MPLE COLLECTION			2 L IPEC				
					0.5 L IPEC				

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
flow meter	1
turbidity meter	200704293

NOTES AND OBSERVATIONS: Total volume purged 0.55 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-41-63
SAMPLE ID: 017

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sun + clouds 70°F

PROJECT NO: 01.0017869.92
DATE: 10/25/10
SAMPLER(S):

WATER COLUMN HEIGHT (ft)

63 (DTB) − 26.25 (DTW) = 36.75 (Water Column Height) ft

Well Diameter: ____ in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 36.75 x 0.041 (Multiplier) = ~~1.425~~ 1.51 (Well Volume) gal

~~1.425~~ 1.51 x 1.5 = 2.26 gal
Designed Purge Volume

TOTAL VOLUME PURGED: 2.50 gal

WATER QUALITY: DTW = 26.25 Transducer Actual Depth

Time	Volume Purged (gal)	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Notes
1120	0	26.25 PUMP	ON						
1125	0.05	—	19.57	2.249	7.50	6.63	124.3	—	
1130	0.25	—	18.98	2.266	6.36	6.75	117.3	32.27	
1136	0.50	—	18.72	2.197	5.86	6.84	110.5	42.59	
1142	0.75	—	18.65	2.149	5.19	6.89	106.9	39.44	
1148	1.10	—	18.60	2.127	4.77	6.93	103.9	25.95	
1155	1.50	—	18.52	2.121	4.45	6.95	101.4	18.45	
1200	1.75	—	18.56	2.124	4.28	6.97	99.4	19.23	
1205	2.20	—	18.47	2.120	4.19	6.96	98.1	22.61	
1206			START SAMPLE COLLECTION						
1210			SAMPLE COMPLETED			: 2 L	IPEC		
1210			PUMP OFF			0.5 L	IPEC		

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070493

NOTES AND OBSERVATIONS:

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-43-28
SAMPLE ID: 017

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: PARTLY CLOUDY, 60'S

PROJECT NO: 01.0017869.92
DATE: 10/25/10
SAMPLER(S): CG, MB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 15.44 Transducer Actual Depth 24.392

Time	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Notes gal
0952	24.395	PUMP	ON					5.5/22	16	0
1000	24.155	18.08	4.570	3.93	5.90	242.0	4.42			0.01
1010	23.963	18.24	4.524	1.40	5.94	219.3	2.13			0.20
1020	23.704	18.42	4.401	0.87	5.98	185.4	1.44			0.40
1025	23.613	18.48	4.380	0.74	6.00	170.4	1.15			0.50
1030	23.542	18.38	4.345	0.74	6.09	158.3	10.80			0.60
1035	23.468	18.44	4.336	0.65	6.12	150.4	0.71			0.70
1040	23.387	18.57	4.339	0.65	6.10	148.1	0.69			0.80
1045	23.345	18.61	4.353	0.65	6.13	140.9	0.58			0.90
1050	23.293	18.67	4.347	0.65	6.14	138.7	0.57			1.00
1054	START	SAMPLE	COLLECTION							
1129	END	SAMPLE	COLLECTION	12L	IPEC					
					500 ML	IPEC				

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	2007D1254

NOTES AND OBSERVATIONS: Total volume purged 1.15 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-43-02
SAMPLE ID: 017

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: PARTLY CLOUDY, 60's

PROJECT NO: 01.0017869.92
DATE: 10/25/10
SAMPLER(S): CB, MB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 17.11 Transducer Actual Depth 35.008

Time	DTW or (Actual Depth)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Notes gal
0952	35.011	PUMP	ON					6/6	32	
1000	34.511	17.25	2.782	2.28	7.09	88.5	5.11		30	0.05
1010	34.559	17.38	2.798	2.25	7.05	86.9	7.30			0.20
1020	34.518	17.65	2.837	2.22	7.05	91.6	5.84			0.35
1025	34.417	17.75	2.848	2.30	7.05	94.0	5.83			0.35
1030	34.378	17.63	2.857	2.22	7.04	96.5	10.24			0.50
1035	34.288	17.55	2.860	2.19	7.03	98.7	5.54			0.65
1040	34.181	17.48	2.861	2.17	7.04	100.4	5.79			0.79
1045	34.074	17.41	2.862	2.15	7.05	102.3	5.64			0.85
1052	START SAMPLE COLLECTION									
1106	END SAMPLE COLLECTION				2L IPEC					
					0.5L IPEC					

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20070125 4

NOTES AND OBSERVATIONS: Total volume purged 1.00 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-45-4
SAMPLE ID: 022

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: M.Sunny 50's windy

PROJECT NO: 01.0017869.92
DATE: 10/22/10
SAMPLER(S): M. BRITOS

WATER COLUMN HEIGHT (ft)

42 (DTB) - 23.97 (DTW) = 18.03 (Water Column Height) ft

Well Diameter: _____ in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 18.03 x 0.163 (Multiplier) = 2.94 (Well Volume) gal

2.94 x 1.5 = 4.41 (Designed Purge Volume) gal

TOTAL VOLUME PURGED: gal 3.45

WATER QUALITY: DTW = Transducer Actual Depth

Time	Volume Purged (gal)	DTW or (Actual Depth)	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Notes
0930	0	17.089	PUMP ON						5.5/7	28	
0935	0.2	15.721	17.20	1.606	3.18	7.11	244.4	—		26	
0940	0.35	14.481	17.80	1.546	1.28	7.40	244.8	2.65			
0945	0.50	13.672	17.67	1.505	0.84	7.50	244.9	1.20			
0952	0.60	13.706	17.88	1.349	0.66	7.65	243.4	0.81			
1000	1.0	12.451	18.23	1.140	0.57	7.81	240.8	0.62			
1009	1.3	11.407	18.16	1.020	0.48	8.03	237.5	1.28			
1021	1.6	10.111	18.13	0.926	0.78	8.43	231.5	16.74			
1030	2.0	8.589	18.12	0.918	0.93	8.45	228.4	23.00			
1040	2.5	6.807	18.51	1.000	0.80	8.23	226.4	20.68			
1050	3.0	5.112	18.24	1.177	0.62	7.96	225.3	15.38			
1100	3.3	3.448	17.80	1.351	0.56	7.78	222.8	12.99			
1102	3.45	3.395		well dry. Let recharge before sample.							
1459		START SAMPLE COLLECTION									
1510		SAMPLE COMPLETED :				2	L	IPEC			
1510		PUMP OFF				0.5	L	IPEC			

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070125 4

NOTES AND OBSERVATIONS:

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-45-61
SAMPLE ID: 022

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: M. Sunny windy 50's

PROJECT NO: 01.0017869.92
DATE: 10/22/10
SAMPLER(S): M. BRITOS

WATER COLUMN HEIGHT (ft)

61 (DTB) − 24.95 (DTW) = 36.05 (Water Column Height) ft

Well Diameter: _____ in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 36.05 x 0.041 (Multiplier) = 1.48 (Well Volume) gal

1.48 x 15 = 2.22 (Designed Purge Volume) gal

TOTAL VOLUME PURGED: _____ gal

WATER QUALITY: DTW = Transducer Actual Depth

Time	Volume Purged (gal)	(DTW) or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Notes
10:25		24.95							
1119	0	—	PUMP ON						
1121	0.1	—	17.62	0.226	7.45	7.72	298.8	68.30	
1124	0.25	—	17.80	0.901	4.85	7.34	300.6	77.21	
1128	0.60	—	17.92	0.969	4.14	7.29	299.6	99.78	
1132	0.95	—	17.78	1.060	3.79	7.28	297.1	111.5	
1137	1.40	—	17.70	1.158	3.43	7.27	293.6	154.9	
1142	1.80	—	17.55	1.201	3.29	7.27	291.4	155.4	
1146	2.10	—	17.59	1.230	3.24	7.28	289.2	132.0	
1148	2.25	—	17.60	1.237	3.23	7.26	288.5	126.9	
1148		STOP PUMP and START SAMPLE COLLECTION							
1154		SAMPLE COMPLETED			: 2	L IPEC			
					0.5	L IPEC			
1154		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	200701254

NOTES AND OBSERVATIONS:

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

APPENDIX E: POST-Q4 2010 MID-QUARTER SAMPLING DATA SHEETS

NO POST QUARTER 4-2010 SAMPLES COLLECTED

APPENDIX F: DOSE CALCULATIONS

Site Indian Point
Job No. 17869.92

Prepared By: JAS
Reviewed By: mib

Parameter Values:

year
2010

Totals					
	Total Catchment Zone (ft^2)	Total Improved Zone (ft^2)	Recharge (ft/yr)	Precipitation (ft/yr)	
	3,969,765	1,432,972	0.81	3.10	
Surface Area					
Northern Clean Zone Improved (ft^2)	Unit 2 North Improved Zone (ft^2)	Unit 1/2 Improved Zone (ft^2)	Unit 3 North Improved Zone (ft^2)	Unit 3 South Improved Zone (ft^2)	Southern Clean Improved Zone (ft^2)
0	148,214	433,904	316,210	321,290	213,354
Northern Clean Unimproved Zone (ft^2)	Unit 2 North Unimproved Zone (ft^2)	Unit 1/2 Unimproved Zone (ft^2)	Unit 3 North Unimproved Zone (ft^2)	Unit 3 South Unimproved Zone (ft^2)	Southern Clean Zone Unimproved (ft^2)
106,429	204,317	438,221	323,116	268,862	585,600
Discounted Area Within Zone	Discounted Area Within Zone	Discounted Area Within Zone	Discounted Area Within Zone	Discounted Area Within Zone	Discounted Area Within Zone
50,265	0	291,186	106,718	17,730	144,347
Northern Clean Zone Catchment (ft^2)	Unit 2 North Catchment Zone (ft^2)	Unit 1/2 Catchment Zone (ft^2)	Unit 3 North Catchment Zone (ft^2)	Unit 3 South Zone (ft^2)	Southern Clean Zone (ft^2)
156,694	352,531	1,163,311	746,044	607,882	943,302
Activity (pCi/L)					
Groundwater					
Northern Clean Zone Catchment	Unit 2 North	Unit 1/2	Unit 3 North	Unit 3 South Zone	Southern Clean Zone
Upper Zone Before Canal: 150	337	4,139	445	741	169
Lower Zone Before Canal: 150	239	3,530	1,286	564	220
Northern Clean Zone	Unit 2 North	Unit 1/2	Unit 3 North	Unit 3 South Zone	Southern Clean Zone
Upper Zone After Canal: 150	256	3,298	303	741	169
Lower Zone After Canal: 150	502	899	478	564	220
Stormwater Discharging to Canal (pCi/L)					
Storm Water for Northern Clean Zone	Storm Water for Unit 2 North	Storm Water for Unit 1/2	Storm Water for Unit 3 North	Storm Water for Unit 3 South	Storm Water for Southern Clean Zone
	2,166		0	1,558	283
NA	*Avg MH-4a*	*NA*	*Avg CB-14 and CB-34*	*Avg U3-CB-B8*	*Avg D1, C3, E6, & E10*
Stormwater Discharging to River (pCi/L)					
Storm Water for Northern Clean Zone	Storm Water for Unit 2 North	Storm Water for Unit 1/2	Storm Water for Unit 3 North	Storm Water for Unit 3 South	Storm Water for Southern Clean Zone
	129	0	0		201
NA	*Avg. MH-1 and MH-12*	*Avg MH-14*	*Avg CB-15*	*NA*	*Avg E13,CB-C2*

Potential Water Received by Storm Drain System

=(Improved Area) x Precipitation

Northern Clean Area	Unit 2 North	Unit 1/2	Unit 3 North	Unit 3 South	Southern Clean Zone	Units
0	459,463	1,345,103	980,252	995,998	661,399	ft^3/yr
0	1,259	3,685	2,686	2,729	1,812	ft^3/day
0.00	6.54	19.14	13.95	14.18	9.41	GPM
0	13,010,545	38,089,071	27,757,643	28,203,511	18,728,730	L/Yr

The total amount of water available to be received by the storm system is computed as the combined area of buildings and paved areas in the catchment multiplied by the annual precipitation rate. Note this conservatively assumes that the amount of water lost to the atmosphere or other sinks after precipitation has fallen on paved or built up surfaces is zero.

Water Directly Recharged to Aquifer from Precipitation

=Unimproved Area x Recharge

Northern Clean Area	Unit 2 North	Unit 1/2	Unit 3 North	Unit 3 South	Southern Clean Zone	Units
85,782	164,680	353,206	260,431	216,703	471,994	ft^3/yr
235	451	968	714	594	1,293	ft^3/day
1.22	2.34	5.03	3.71	3.08	6.72	GPM
2,429,073	4,663,211	10,001,688	7,374,588	6,136,349	13,365,375	L/Yr

Note that this calculation reflects recharge to the aquifer in non-paved areas. The Recharge value listed above and used in this calculation reflects only that portion of precipitation that actually recharges the aquifer.

Water Recharged to Aquifer (Direct Recharge Plus Storm Water Leakage Minus Building Drain Removal)

=(Direct Recharge + X% Water Received by Storm System) - (Y% x Water Removed by Building Drains)

Total Water Discharged to Aquifer

	[Northern Clean Area Catchment + (0% Storm Drain Water)][1]	[Unit 2 North + (50% Storm Drain Water)]-[5gpm]	[Unit 1/2 Area Catchment + (30% Storm Drain Water)]-[7.5 gpm]	[Unit 3 North Area Catchment + (60% Storm Drain Water)]-[7.5gpm]	[Unit 3 South Area + (10% Storm Drain Water)]	[Southern Clean Zone Area + (40% Storm Drain Water)]	Units
Upper and Lower Zone	85,782	43,099	229,768	321,614	316,303	736,553	ft^3/yr
	235	118	630	881	867	2,018	ft^3/day
	1.22	0.61	3.27	4.58	4.50	10.48	GPM
	2,429,073	1,220,421	6,506,317	9,107,080	8,956,700	20,856,867	L/Yr

[1] There are no improved surfaces in Northern Clean Zone.

Groundwater Discharged to Canal

=Water Recharged to Aquifer x X% flowing to Canal

	Northern Clean Area Catchment x 0%	Unit 2 North x 15.2%	Unit 1/2 Area Catchment 24.2%	Unit 3 North Area Catchment x 22.9%	Unit 3 South Area x68.4%	Southern Clean Zone Area x 0%	Units
Upper and Lower Zone	0	6,551	55,604	73,649	216,351	0	ft^3/yr
	0	18	152	202	593	0	ft^3/day
	0.00	0.09	0.79	1.05	3.08	0.00	GPM
	0	185,504	1,574,529	2,085,521	6,126,383	0	L/Yr

Groundwater Discharged to River

=Water Recharged to Aquifer x X% flowing to River x Y% Flowing in Appropriate Vertical Zone

	Northern Clean Area Catchment x 100% x 59.3%	Unit 2 North x 84.8% x 15.1%	Unit 1/2 Area Catchment x 75.8% x 11.7%	Unit 3 North Area Catchment x 77.1% x 47.9%	Unit 3 South Area x 31.6% x 31.3%	Southern Clean Zone Area x 100% x 55.2%	Units
Upper Zone	50,869	5,519	20,377	118,775	31,285	406,577	ft^3/yr
	139	15	56	325	86	1,114	ft^3/day
	0.72	0.08	0.29	1.69	0.45	5.79	GPM
	1,440,440	156,273	577,019	3,363,327	885,889	11,512,991	L/Yr
	Northern Clean Area Catchment x 100% x 40.7%	Unit 2 North x 84.8% x 84.9%	Unit 1/2 Area Catchment 75.8% x 88.3%	Unit 3 North Area Catchment x 77.1% x 52.1%	Unit 3 South Area x 31.6% x 68.7%	Southern Clean Zone Area x 100% x 44.8%	Units
Lower Zone	34,913	31,029	153,787	129,189	68,667	329,976	ft^3/yr
	96	85	421	354	188	904	ft^3/day
	0.50	0.44	2.19	1.84	0.98	4.70	GPM
	988,633	878,645	4,354,769	3,658,232	1,944,428	9,343,877	L/Yr

Water Remaining in Storm Drains and Discharged to Canal

=Storm Drain Water x X% Not Leaking to Groundwater and Not Discharging to River

Northern Clean Area Catchment (0% Storm Drain Water)	Unit 2 North (45% Unit 2 North and 30% of Unit 1/2 Storm Drain Water). Plus 5 gpm (351k cf/yr) from U2 footing drain.	Unit 1/2 Area Catchment (0% Storm Drain Water)	Unit 3 North Area Catchment (3% Unit 3 North Storm Drain Water)	Unit 3 South Area (3% Unit 3 North and 42% Unit 3 South Storm Drain Water)	Southern Clean Zone Area (30% Unit 1/2, 27% Unit 3 North, 43% Unit 3 South, and 55% Southern Clean Zone Storm Drain Water)	Units
0	961,289	0	29,408	447,727	1,460,247	ft^3/yr
0	2,634	0	81	1,227	4,001	ft^3/day
0	13.68	0.00	0.42	6.37	20.78	GPM
0	27,221,998	0	832,729	12,678,204	41,349,597	L/Yr

Water Remaining in Storm Drains and Discharged to River

Northern Clean Area Catchment (0% Storm Drain Water)	Unit 2 North (5% Storm Drain Water)	Unit 1/2 Area Catchment (10% Storm Drain Water)	Unit 3 North Area Catchment (7% Storm Drain Water)	Unit 3 South Area (5% Storm Drain Water)	Southern Clean Zone Area (5% Storm Drain Water)	Units
0	22,973	134,510	68,618	49,800	33,070	ft^3/yr
0	63	369	188	136	91	ft^3/day
0	0.33	1.91	0.98	0.71	0.47	GPM
0	650,527	3,808,907	1,943,035	1,410,176	936,437	L/Yr

Site Indian Point
Job No. 17869.92

Prepared By: JAS
Reviewed By: mib

Flux Calculations

Conceptual Model: Migration Pathway Summary

	Northern Clean Area	Unit 2 North	Unit 1/2	Unit 3 North	Unit 3 South	Southern Clean Zone
GW	100% Upper and Lower Zone To River	84.8% Upper Zone and Lower Zone Flow To River. 15.2% Upper Zone and Lower Zone Flow to Canal	75.8% Upper Zone and Lower Zone To River. 24.2% Upper Zone and Lower Zone to Canal	77.1% Upper Zone and Lower Zone To River. 22.9% Upper Zone and Lower Zone to Canal	31.6% Upper Zone and Lower Zone To River. 68.4% Upper Zone and Lower Zone to Canal	100% Upper and Lower Zone To River
SW	NA	To Canal (Storm Water Considered Clean; Estimated at 5.5 GPM) and To River (5% Storm Water)	To Canal (60% Storm Water) and To River (10% Storm Water)	To Canal (33% Storm Water) and To River (7% Storm Water)	To Canal (85% Storm Water) and To River (5% Storm Water)	To Canal (55% Storm Water) and To River (5% Storm Water)

Flux (pCi/Yr)

	North Clean Area	Unit 2 North	Unit 1/2	Unit 3 North	Unit 3 South	South Clean Zone	Total
GW to River-Upper Zone	2.16E+08	4.00E+07	1.90E+09	1.02E+09	6.56E+08	1.95E+09	**5.78E+09**
GW to River-Lower Zone	1.48E+08	4.41E+08	3.92E+09	1.75E+09	1.10E+09	2.06E+09	**9.41E+09**
GW to Canal	0.00E+00	6.25E+07	6.52E+09	9.29E+08	4.54E+09	0.00E+00	**1.20E+10**
SW to Canal	NA	5.90E+10	0.00E+00	0.00E+00	1.97E+10	1.17E+10	**9.04E+10**
SW to River	NA	8.40E+07	0.00E+00	0.00E+00	0.00E+00	1.89E+08	**2.73E+08**
						Curies/Yr ==>	0.12

Notes:

The recharge rate used herein, 26% of precipitation (~10 in/yr), is within the range of values discussed in the USGS modeling report[1] The reported recharge ranged from 3.6 inches/year to 7.5 inches/year for a till to 20 inches per year for coarse grained glacially stratified deposits. A yearly rolling average precipitation value measured at the Facility meteorological station is also used in the computations. The catchment area was defined using an AutoCAD topo map for the Site and surrounding area. The catchment was defined by starting at the area marked "line of water grant" and tracking east, away from the River, to define portions of the land surface contributing water to the selected discharge zone. Calculations assume that run-off or overland flow in unimproved areas of the Site is negligible, there are no changes in storage and the Hudson River is a gaining stream.

1. USGS. Water Use, Ground-Water Recharge and Availability, and Quality of Water in the Greenwich Area, Fairfield County, Connecticut and Westchester County, New York, 2000-2002

APPENDIX G: UNIT 2 TRITIUM PLUME TREND ANALYSES

TABLE G1
MANN-KENDALL TREND EVALUATION SUMMARY
TRITIUM IN GROUNDWATER NEAR UNIT 2
INDIAN POINT ENERGY CENTER
BUCHANAN, NY

Well ID	Number of Data Points	Number of Times below MDC	Minimum Tritium Activity (pCi/L)	Maximum Tritium Activity (pCi/L)	Mann-Kendall Statistic (S)	Normalized Test Statistic (Z)	Probability	Trend at 95% Level of Significance
MW-30-69	40	0	7.36E+04	6.01E+05	-164	-1.90	0.971	decreasing
MW-30-84	27	0	3.78E+03	1.25E+04	116	2.40	0.992	increasing
MW-31-49	39	0	2.98E+02	1.04E+05	91	1.09	0.862	no trend
MW-31-63	27	0	5.00E+03	7.35E+04	128	2.65	0.996	increasing
MW-31-85	27	0	3.17E+02	2.25E+04	139	2.88	0.998	increasing
MW-32-59	26	0	4.13E+02	1.55E+05	56	1.21	0.887	no trend
MW-32-85	25	0	5.42E+03	1.49E+04	117	2.71	0.997	increasing
MW-32-149	22	0	1.99E+02	1.05E+04	3	0.06	0.522	no trend
MW-32-173	20	0	4.31E+02	5.89E+03	-8	-0.23	0.590	no trend
MW-32-190	24	0	1.53E+03	1.13E+04	-197	-4.86	1.000	decreasing
MW-33	26	0	3.69E+03	2.64E+05	-167	-3.66	1.000	decreasing
MW-35	20	0	1.04E+03	1.19E+05	-88	-2.82	0.998	decreasing
MW-36-24	18	2	1.54E+02	3.42E+04	25	0.91	0.818	no trend
MW-36-41	13	0	6.11E+03	5.52E+04	-35	-2.07	0.981	decreasing
MW-36-52	18	0	5.97E+03	2.68E+04	-103	-3.86	1.000	decreasing
MW-37-22	20	0	2.26E+03	3.49E+04	-60	-1.91	0.972	decreasing
MW-37-32	20	0	2.49E+03	3.01E+04	-58	-1.85	0.968	decreasing
MW-37-40	19	0	4.22E+03	1.70E+04	-89	-3.08	0.999	decreasing
MW-37-57	20	0	4.05E+03	4.48E+04	-82	-2.63	0.996	decreasing
MW-42-49	20	0	1.12E+03	7.22E+04	-59	-1.88	0.970	decreasing
MW-42-78	15	0	3.46E+02	1.28E+03	-11	-0.49	0.690	no trend
MW-49-26	22	0	2.59E+03	1.54E+04	-195	-5.47	1.000	decreasing
MW-49-42	22	0	2.20E+03	1.13E+04	-179	-5.02	1.000	decreasing
MW-49-65	22	0	1.26E+03	5.76E+03	-162	-4.54	1.000	decreasing
MW-50-42	23	4	1.01E+02	9.75E+03	-51	-1.32	0.907	no trend
MW-50-66	27	0	2.08E+03	1.08E+04	-199	-4.13	1.000	decreasing
MW-53-82	17	0	4.54E+02	1.32E+04	2	0.04	0.516	no trend
MW-53-120	20	0	3.81E+03	9.61E+03	-128	-4.12	1.000	decreasing
MW-55-24	16	0	7.82E+02	3.08E+03	-19	-0.81	0.791	no trend
MW-55-35	15	0	8.53E+02	9.04E+03	-47	-2.28	0.989	decreasing
MW-55-54	16	0	5.47E+03	1.31E+04	-23	-0.99	0.839	no trend
MW-111	36	0	6.81E+03	5.78E+05	-285	-3.87	1.000	decreasing
DOWNGRADIENT WELLS								
MW-66-21	15	2	8.28E+01	3.57E+03	-19	-0.89	0.813	no trend
MW-66-36	14	0	3.05E+03	9.10E+03	-71	-3.83	1.000	decreasing
MW-67-39	13	0	2.55E+03	5.07E+03	-36	-2.14	0.984	decreasing
MW-67-105	14	0	1.14E+03	2.93E+03	-59	-3.18	0.999	decreasing
MW-67-173	14	0	6.25E+02	1.05E+03	-54	-2.90	0.998	decreasing
MW-67-219	13	0	9.22E+02	1.44E+03	-6	-0.31	0.620	no trend
MW-67-276	13	0	6.79E+02	1.18E+03	-11	-0.61	0.729	no trend
MW-67-323	13	1	3.13E+02	1.29E+03	16	0.92	0.820	no trend
MW-67-340	13	0	3.69E+02	6.69E+02	32	1.89	0.971	increasing

Notes: Calculations based on Mann-Kendall trend evaluations as presented in U.S. EPA Practical Methods for Data Analysis, U.S. EPA QA/G-9 QA00 UPDATE, July 2000, Section 4.3.4

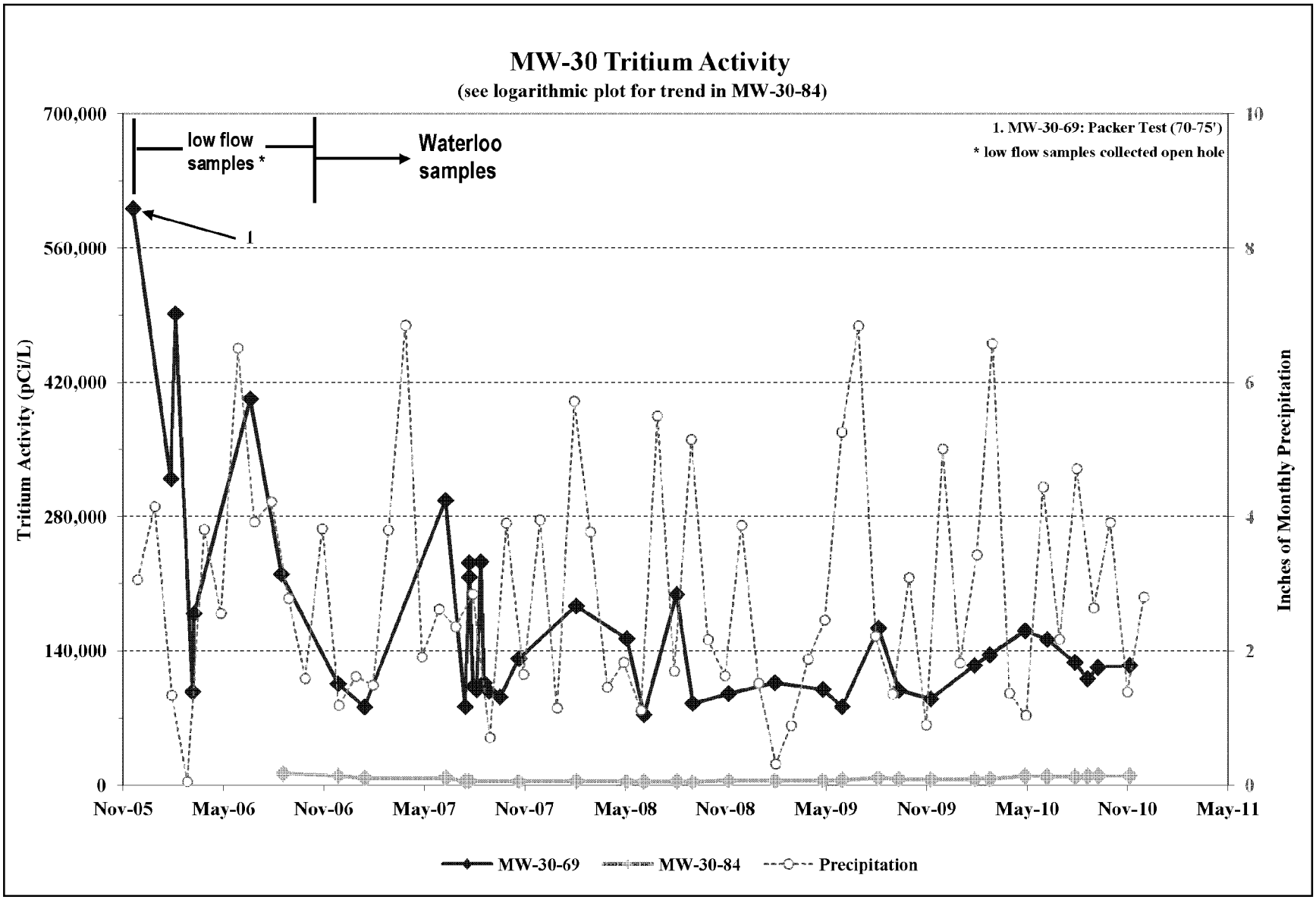


FIGURE G1

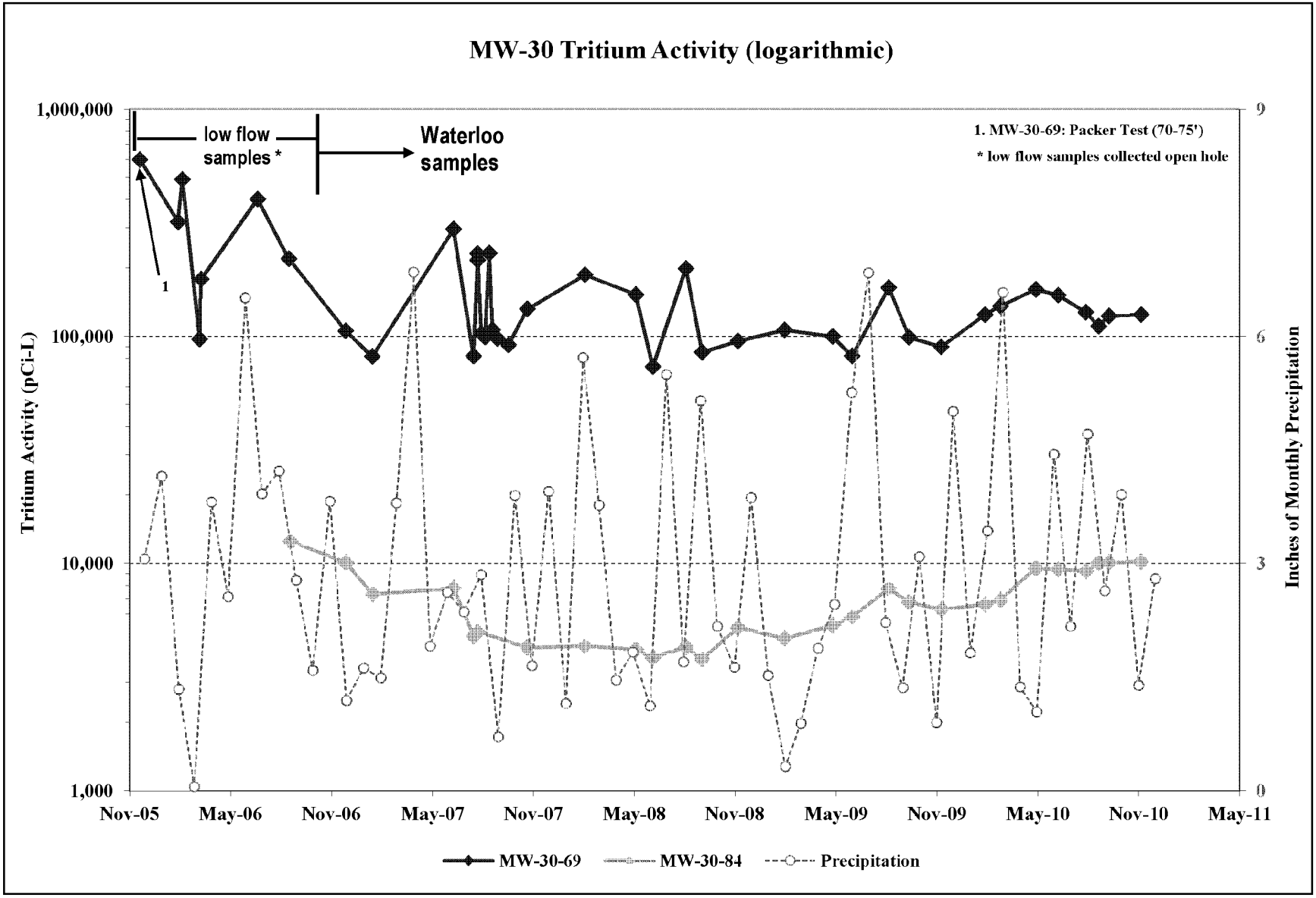

MW-30 Tritium Activity (logarithmic)
1,000,000
100,000
10,000
1,000
Tritium Activity (pCi-L)
9
6
3
0
Inches of Monthly Precipitation
low flow samples *
Waterloo samples
1
1. MW-30-69: Packer Test (70-75')
* low flow samples collected open hole
Nov-05
May-06
Nov-06
May-07
Nov-07
May-08
Nov-08
May-09
Nov-09
May-10
Nov-10
May-11
MW-30-69
MW-30-84
Precipitation

FIGURE G1a

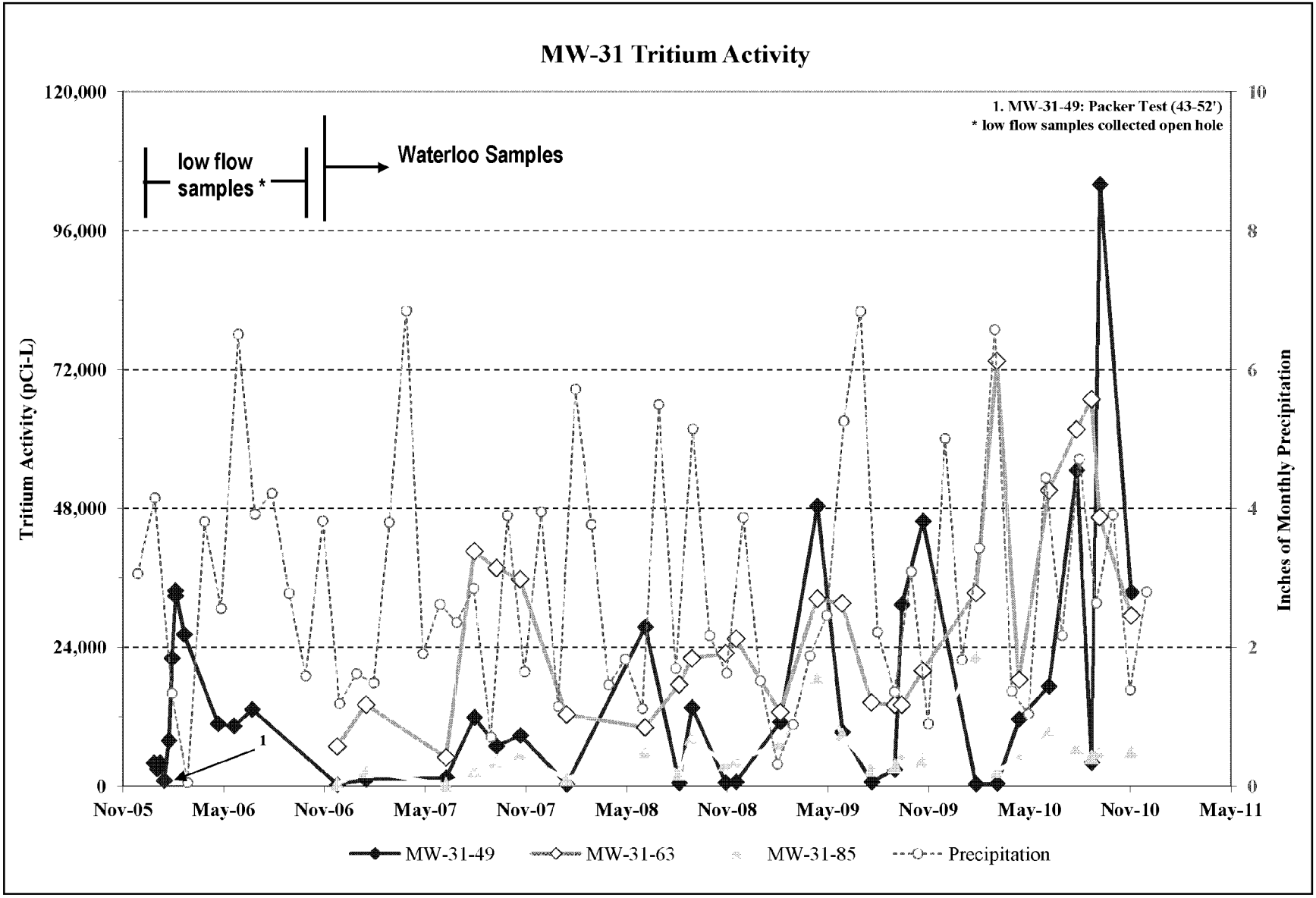


FIGURE G2

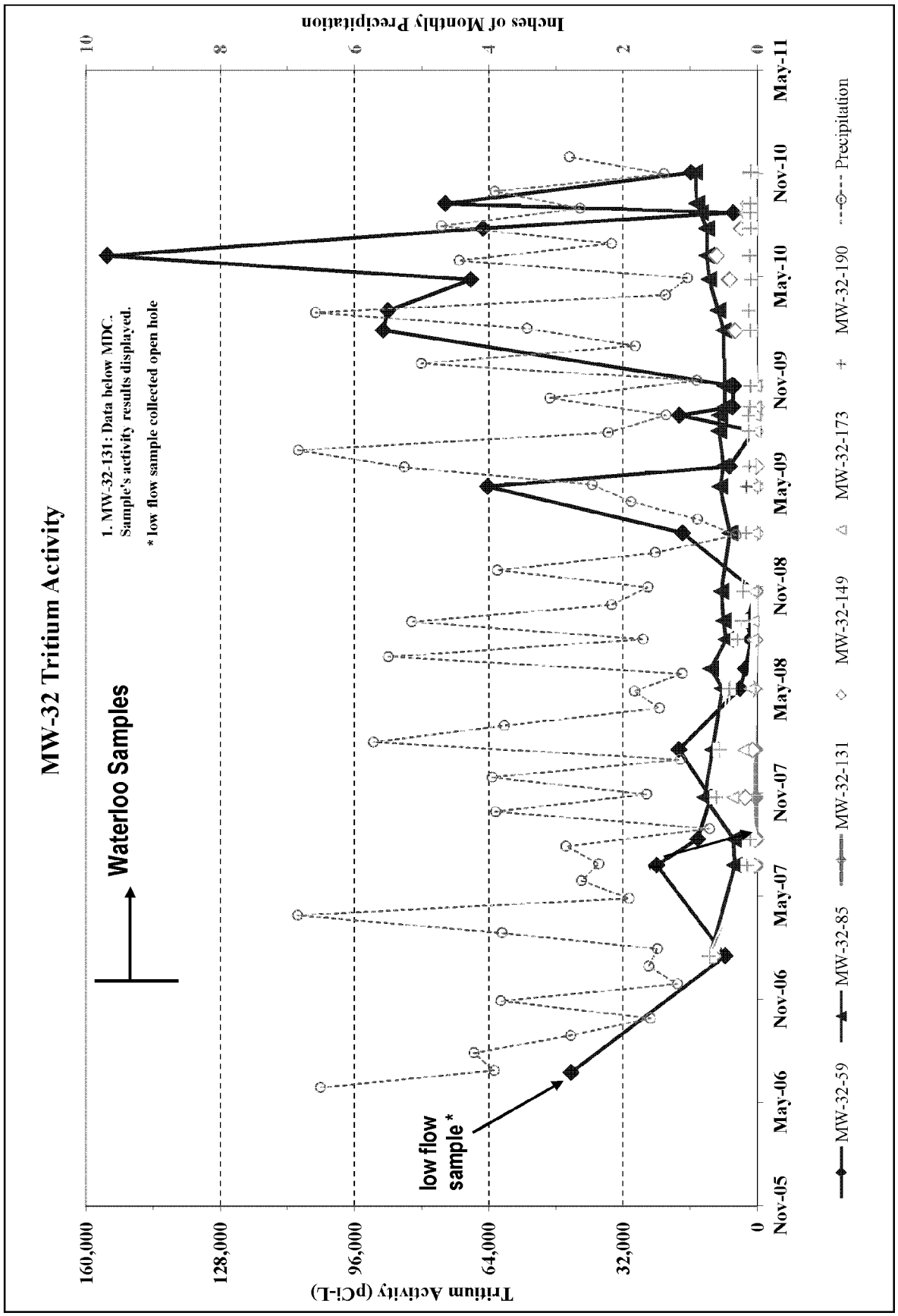

MW-32 Tritium Activity
Waterloo Samples
1. MW-32-131: Data below MDC. Sample's activity results displayed.
* low flow sample collected open hole
low flow sample *
Tritium Activity (pCi-L)
Inches of Monthly Precipitation
160,000
128,000
96,000
64,000
32,000
0
10
8
6
4
2
0
Nov-05
May-06
Nov-06
May-07
Nov-07
May-08
Nov-08
May-09
Nov-09
May-10
Nov-10
May-11
MW-32-59
MW-32-85
MW-32-131
MW-32-149
MW-32-173
MW-32-190
Precipitation

FIGURE G3

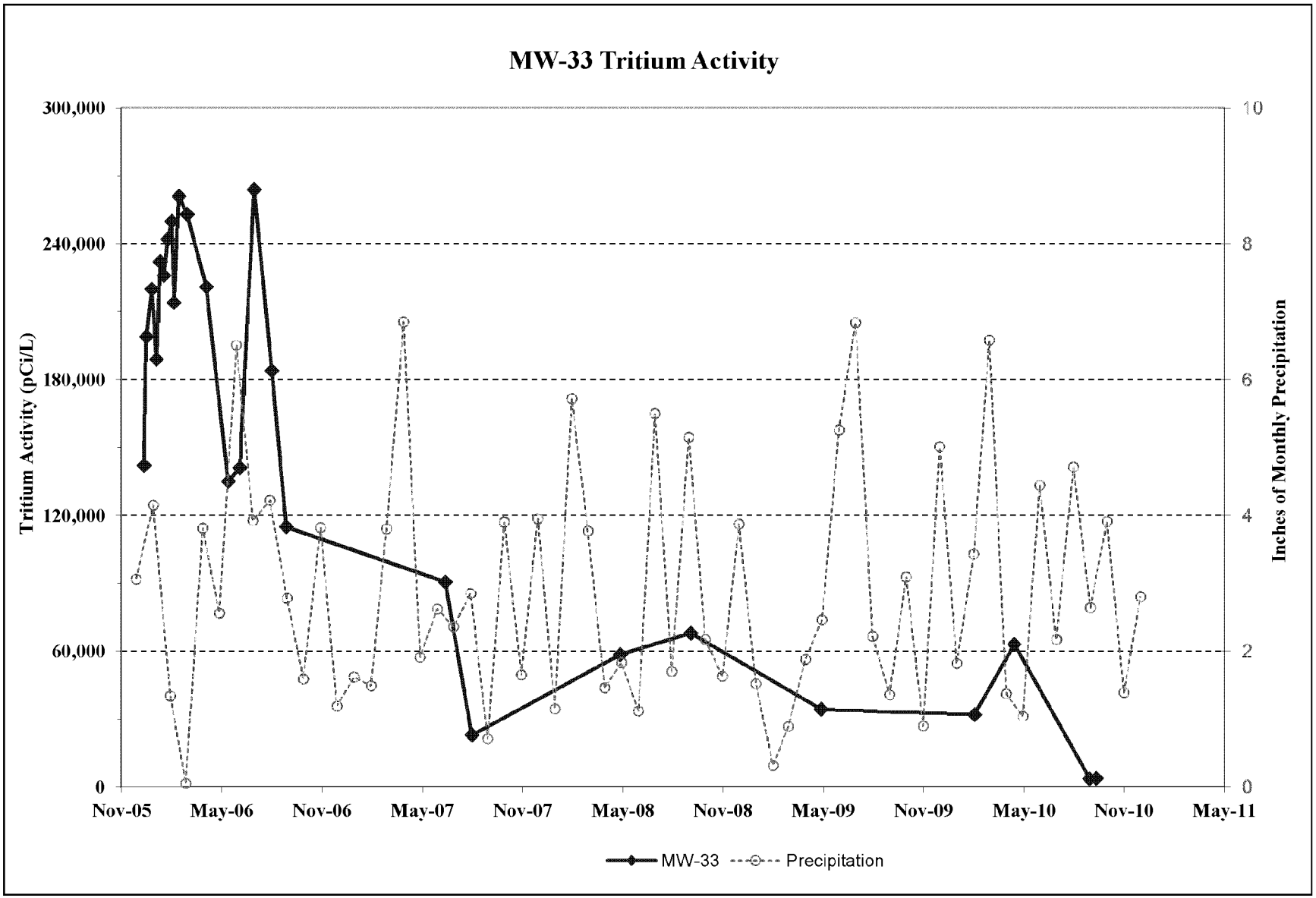

MW-33 Tritium Activity
Tritium Activity (pCi/L)
Inches of Monthly Precipitation
300,000
240,000
180,000
120,000
60,000
0
10
8
6
4
2
0
Nov-05
May-06
Nov-06
May-07
Nov-07
May-08
Nov-08
May-09
Nov-09
May-10
Nov-10
May-11
MW-33
Precipitation

FIGURE G4

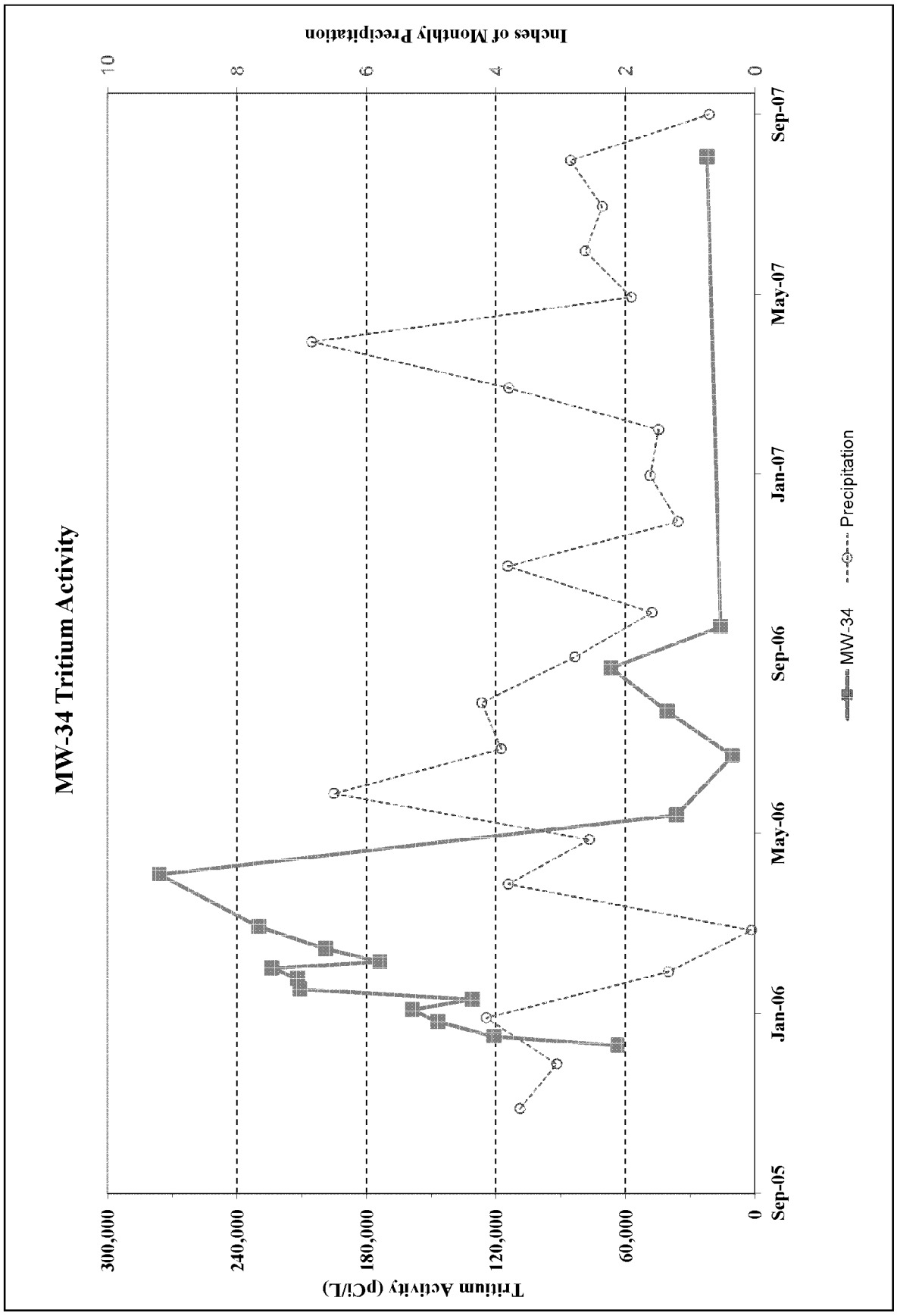


FIGURE G5

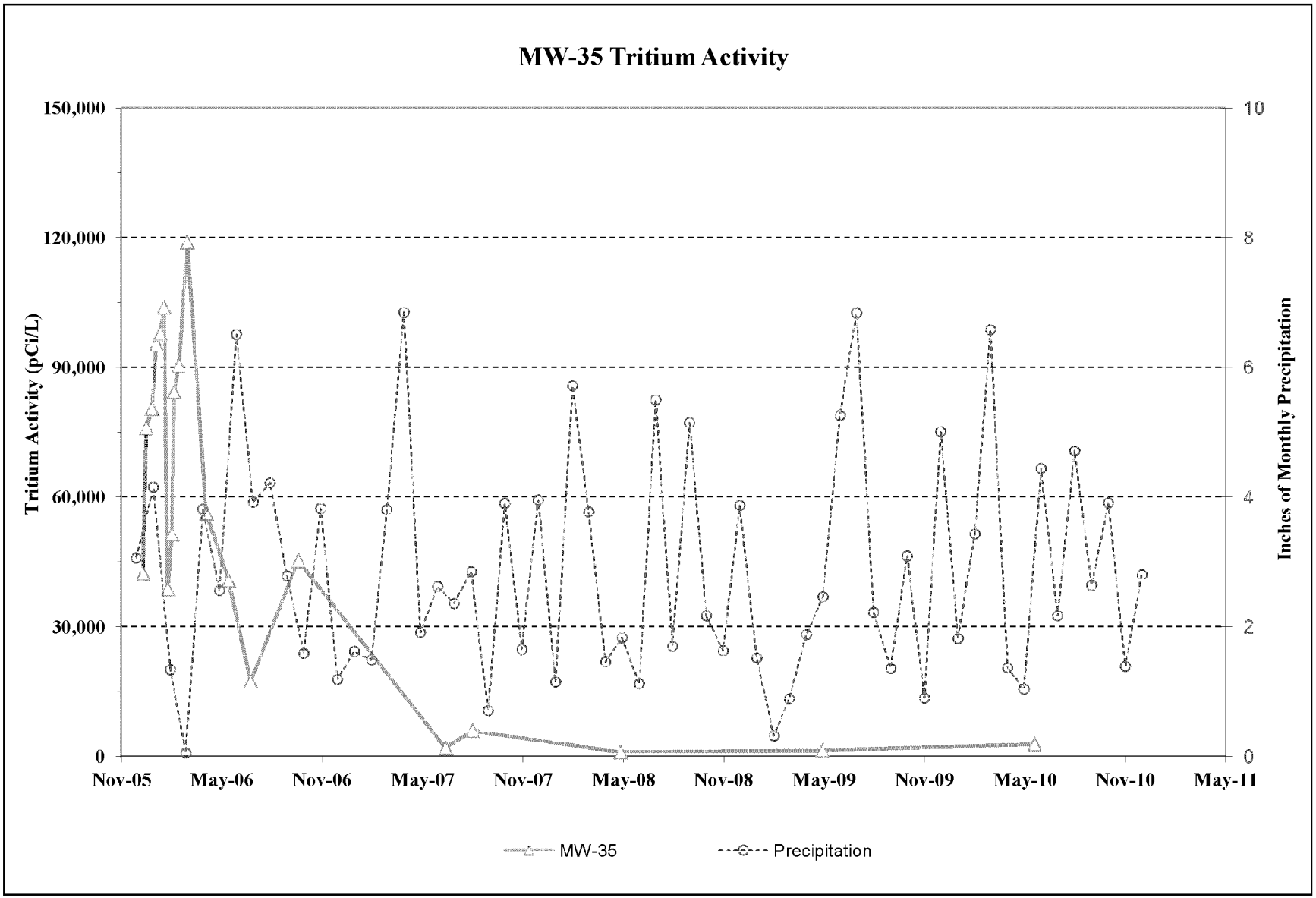


FIGURE G6

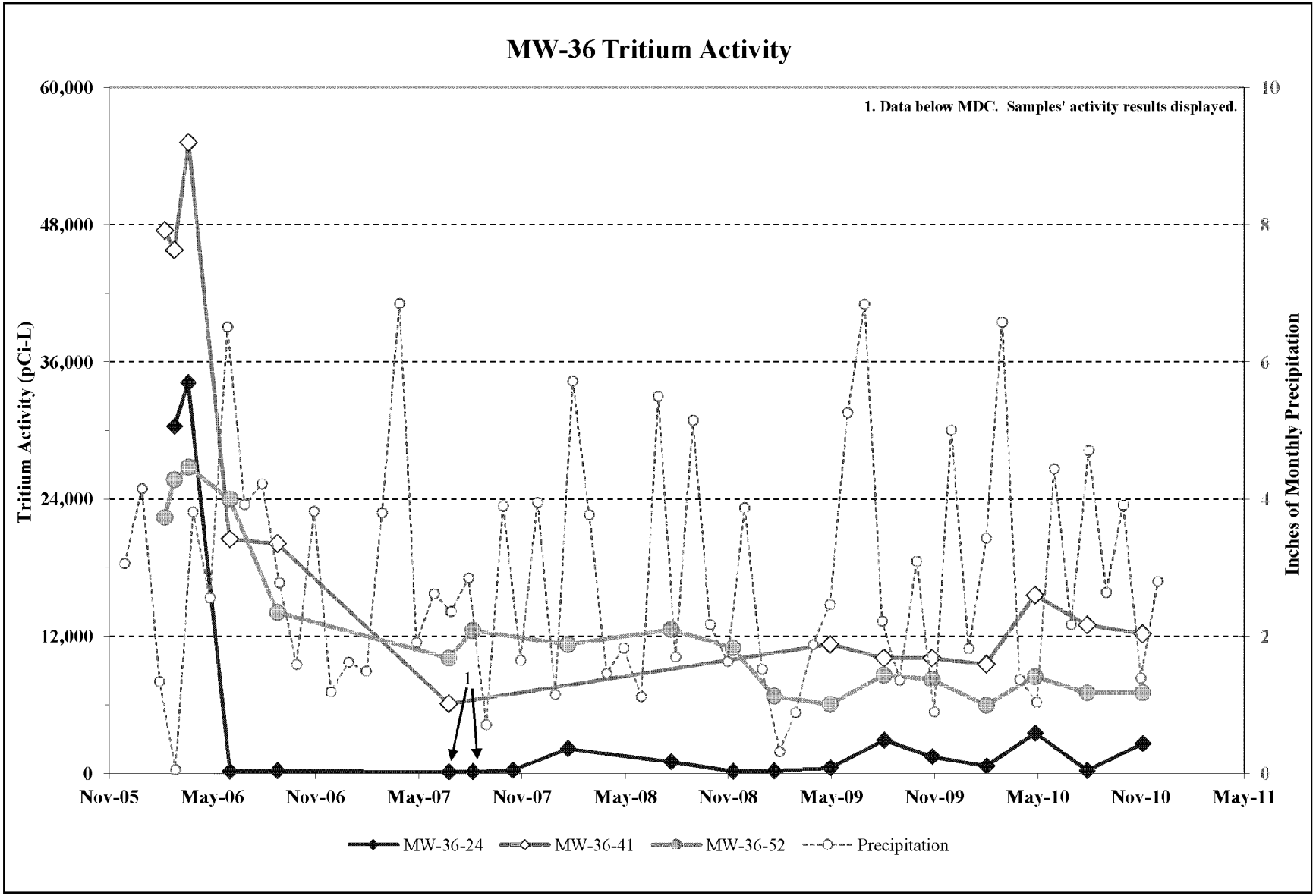

MW-36 Tritium Activity
1. Data below MDC. Samples' activity results displayed.
Tritium Activity (pCi-L)
Inches of Monthly Precipitation
60,000
48,000
36,000
24,000
12,000
0
10
8
6
4
2
0
Nov-05
May-06
Nov-06
May-07
Nov-07
May-08
Nov-08
May-09
Nov-09
May-10
Nov-10
May-11
1
MW-36-24
MW-36-41
MW-36-52
Precipitation

FIGURE G7

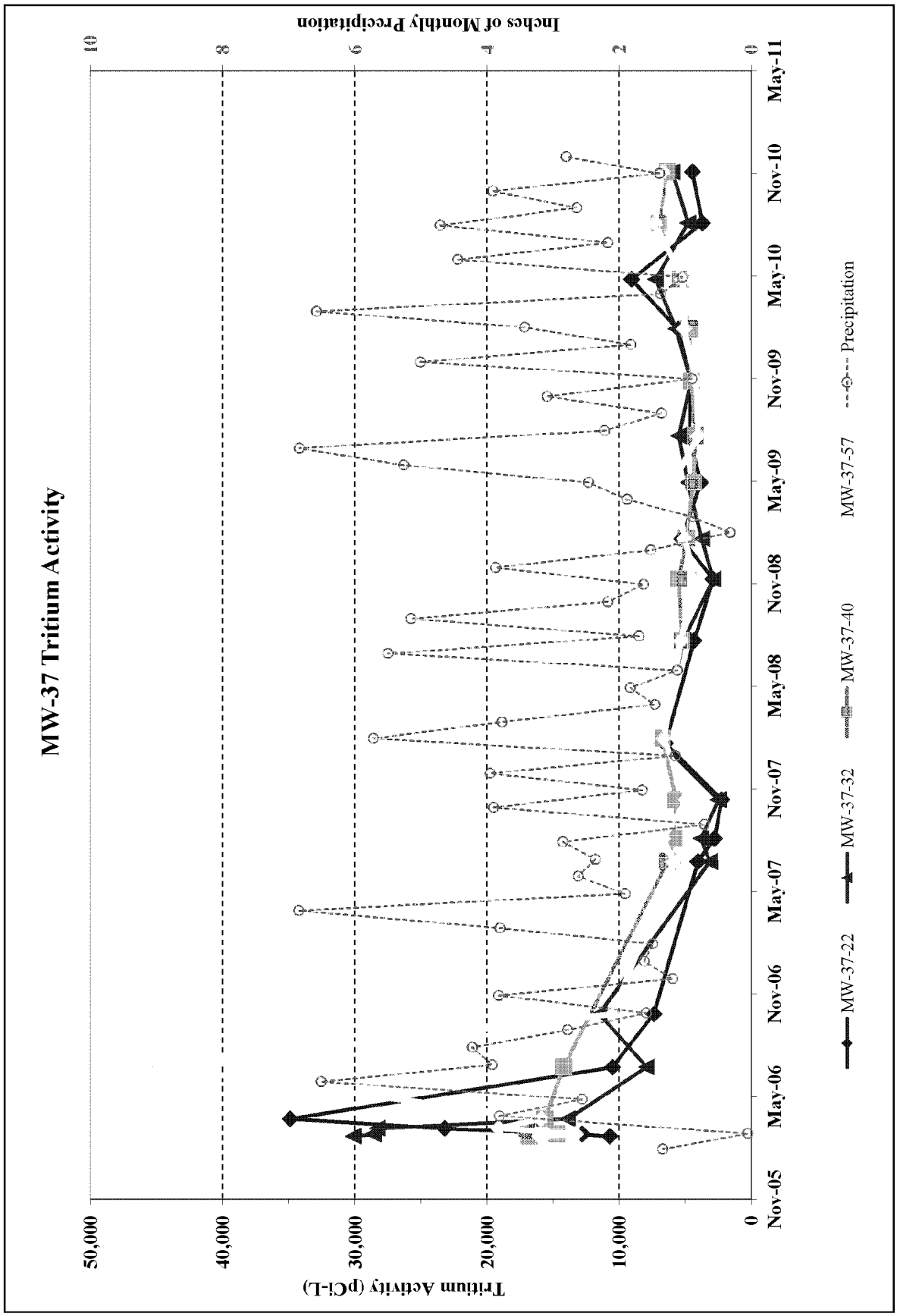


FIGURE G8

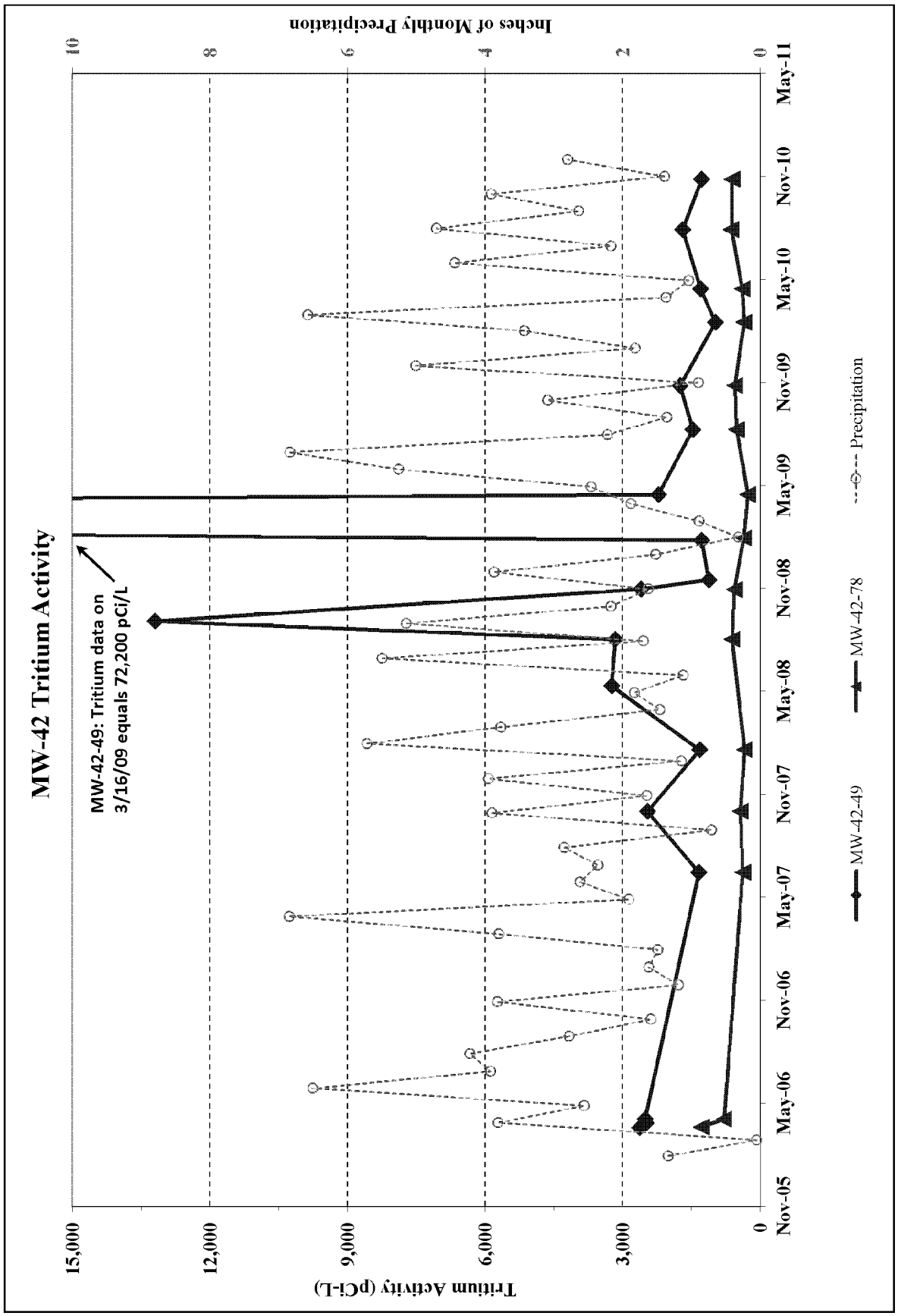

MW-42 Tritium Activity
MW-42-49: Tritium data on 3/16/09 equals 72,200 pCi/L
Tritium Activity (pCi-L)
Inches of Monthly Precipitation
15,000
12,000
9,000
6,000
3,000
0
10
8
6
4
2
0
Nov-05
May-06
Nov-06
May-07
Nov-07
May-08
Nov-08
May-09
Nov-09
May-10
Nov-10
May-11
MW-42-49
MW-42-78
Precipitation

FIGURE G9

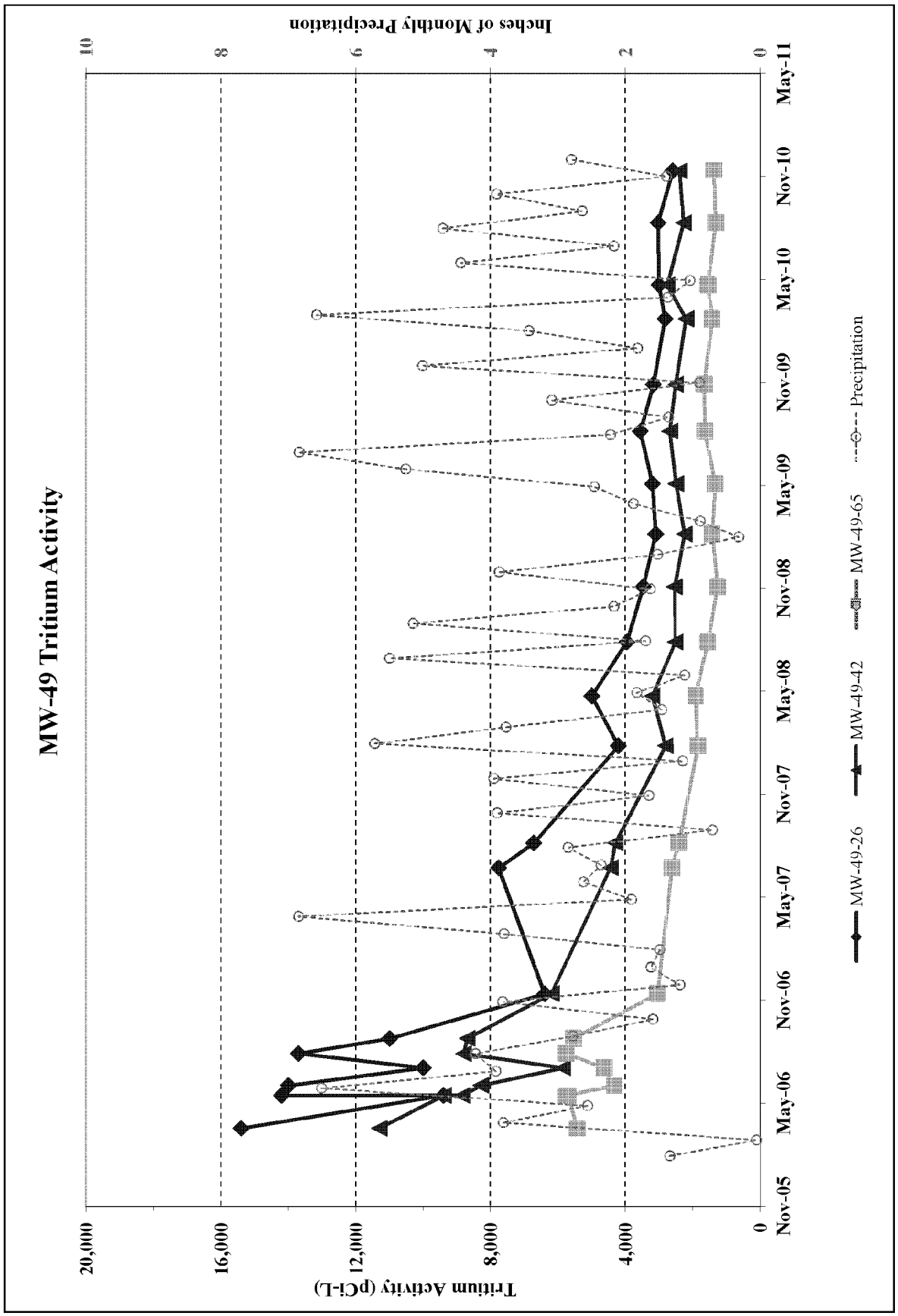

MW-49 Tritium Activity
Tritium Activity (pCi-L)
Inches of Monthly Precipitation
20,000
16,000
12,000
8,000
4,000
0
10
8
6
4
2
0
Nov-05
May-06
Nov-06
May-07
Nov-07
May-08
Nov-08
May-09
Nov-09
May-10
Nov-10
May-11
MW-49-26
MW-49-42
MW-49-65
Precipitation

FIGURE G10

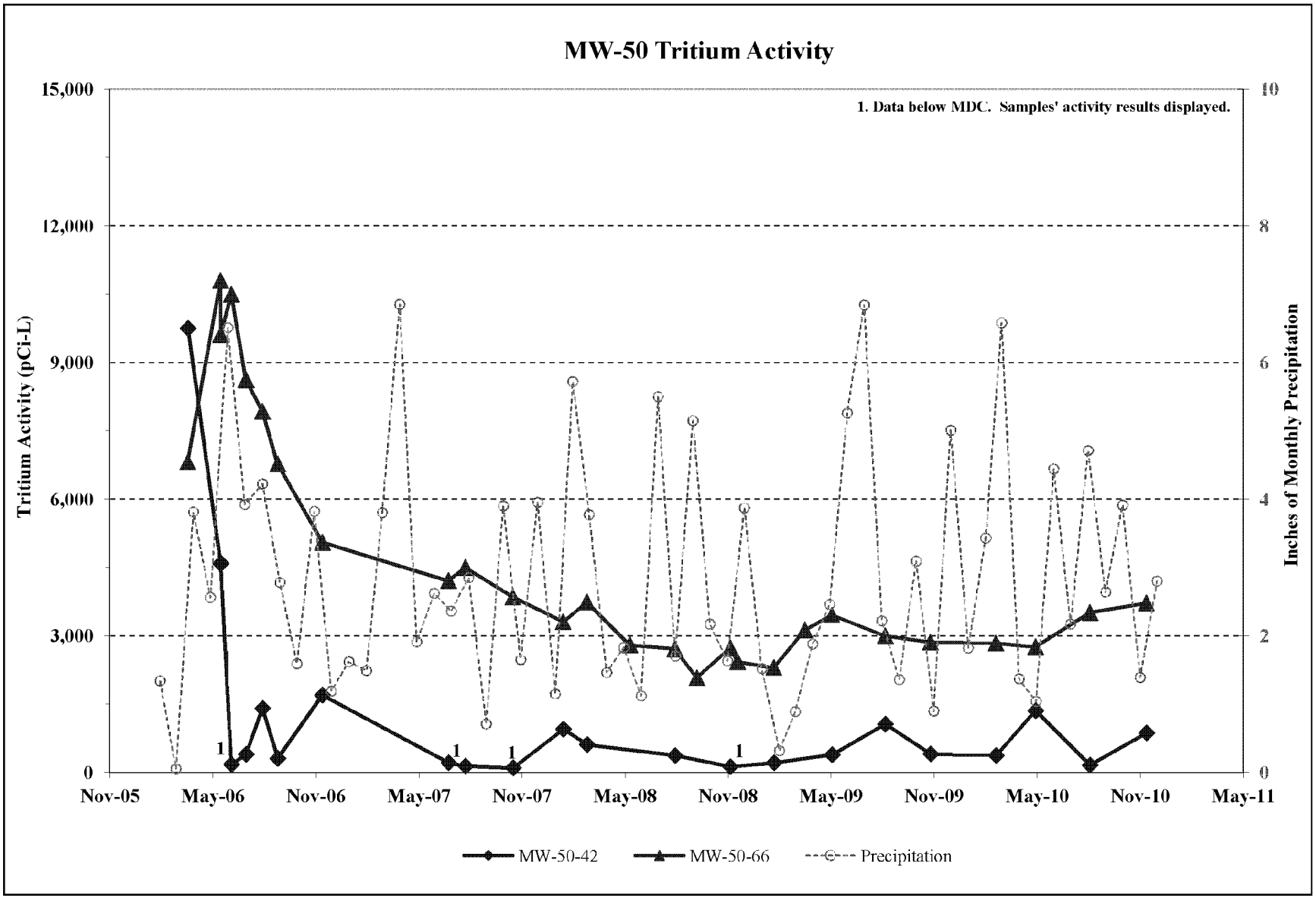

MW-50 Tritium Activity
1. Data below MDC. Samples' activity results displayed.
Tritium Activity (pCi-L)
Inches of Monthly Precipitation
15,000
12,000
9,000
6,000
3,000
0
10
8
6
4
2
0
Nov-05
May-06
Nov-06
May-07
Nov-07
May-08
Nov-08
May-09
Nov-09
May-10
Nov-10
May-11
1
1
1
1
MW-50-42
MW-50-66
Precipitation

FIGURE G11

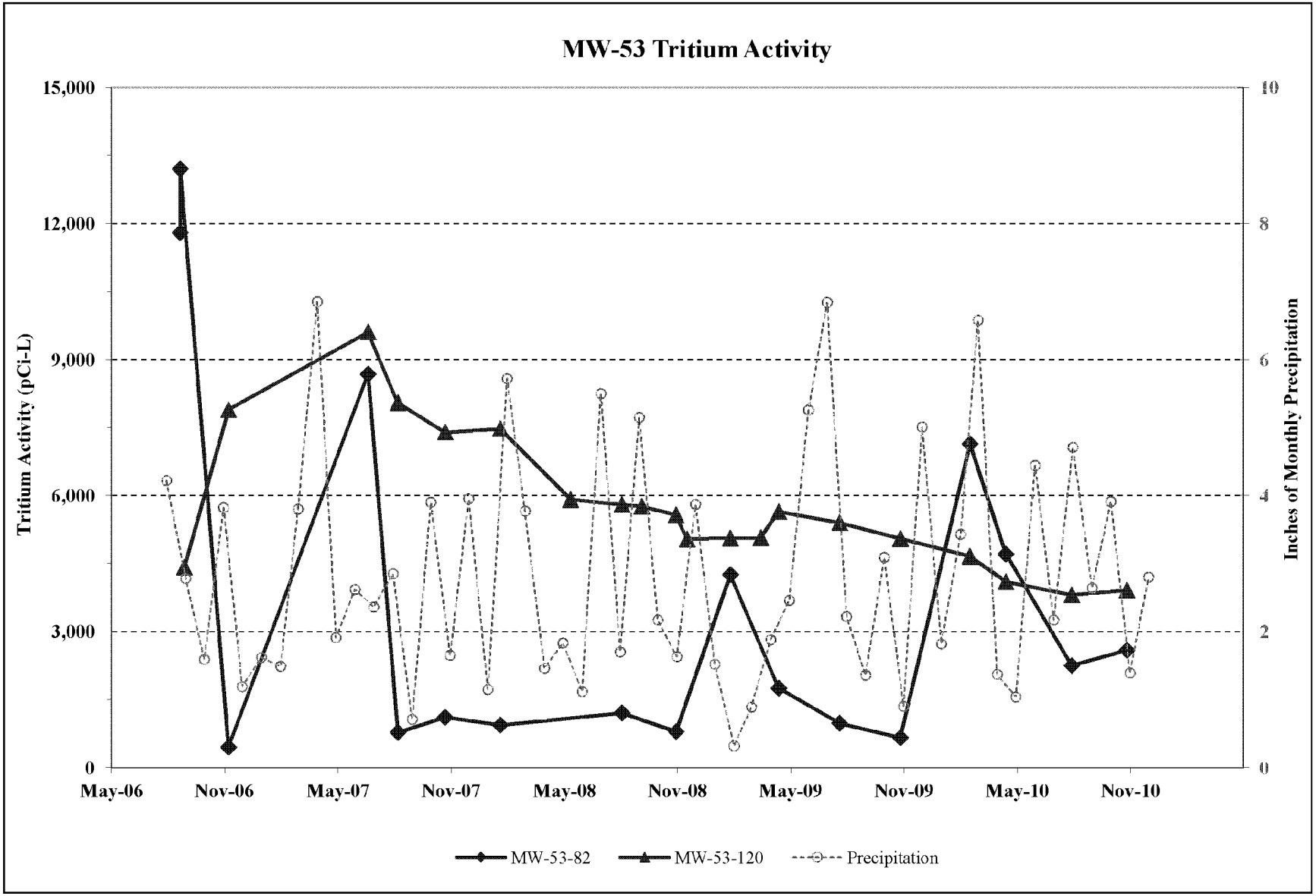


FIGURE G12

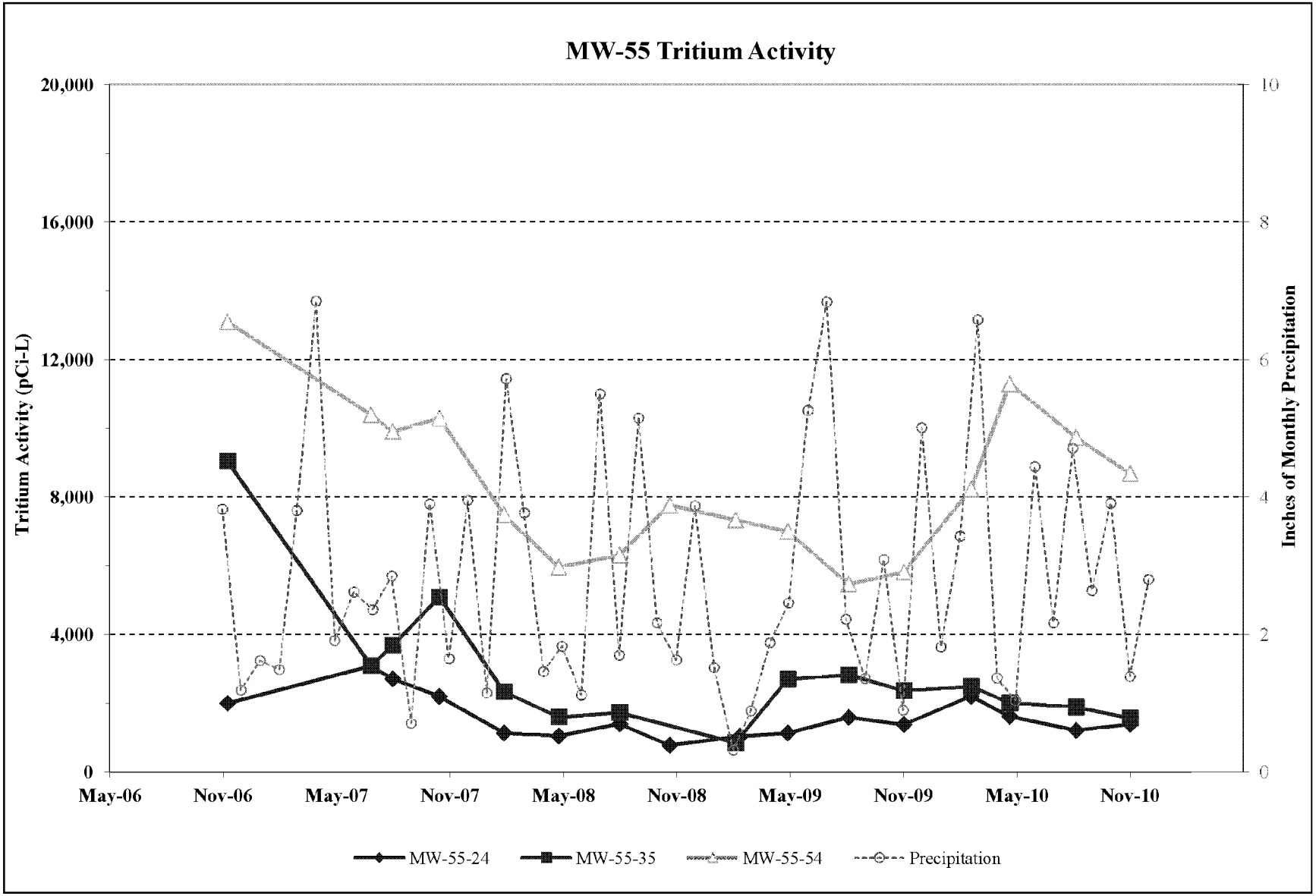

MW-55 Tritium Activity
Tritium Activity (pCi-L)
Inches of Monthly Precipitation
20,000
16,000
12,000
8,000
4,000
0
10
8
6
4
2
0
May-06
Nov-06
May-07
Nov-07
May-08
Nov-08
May-09
Nov-09
May-10
Nov-10
MW-55-24
MW-55-35
MW-55-54
Precipitation

FIGURE G13

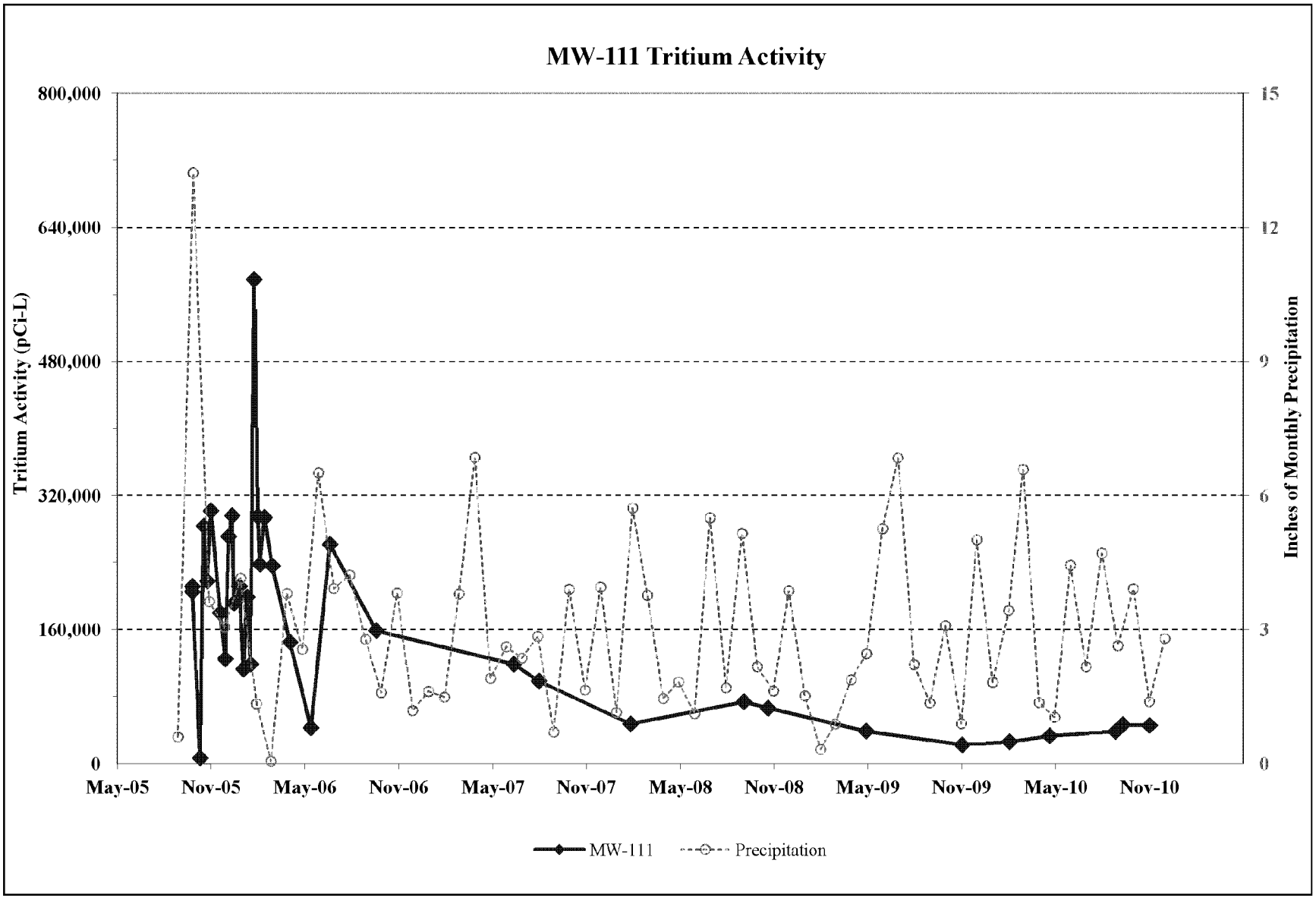


FIGURE G14

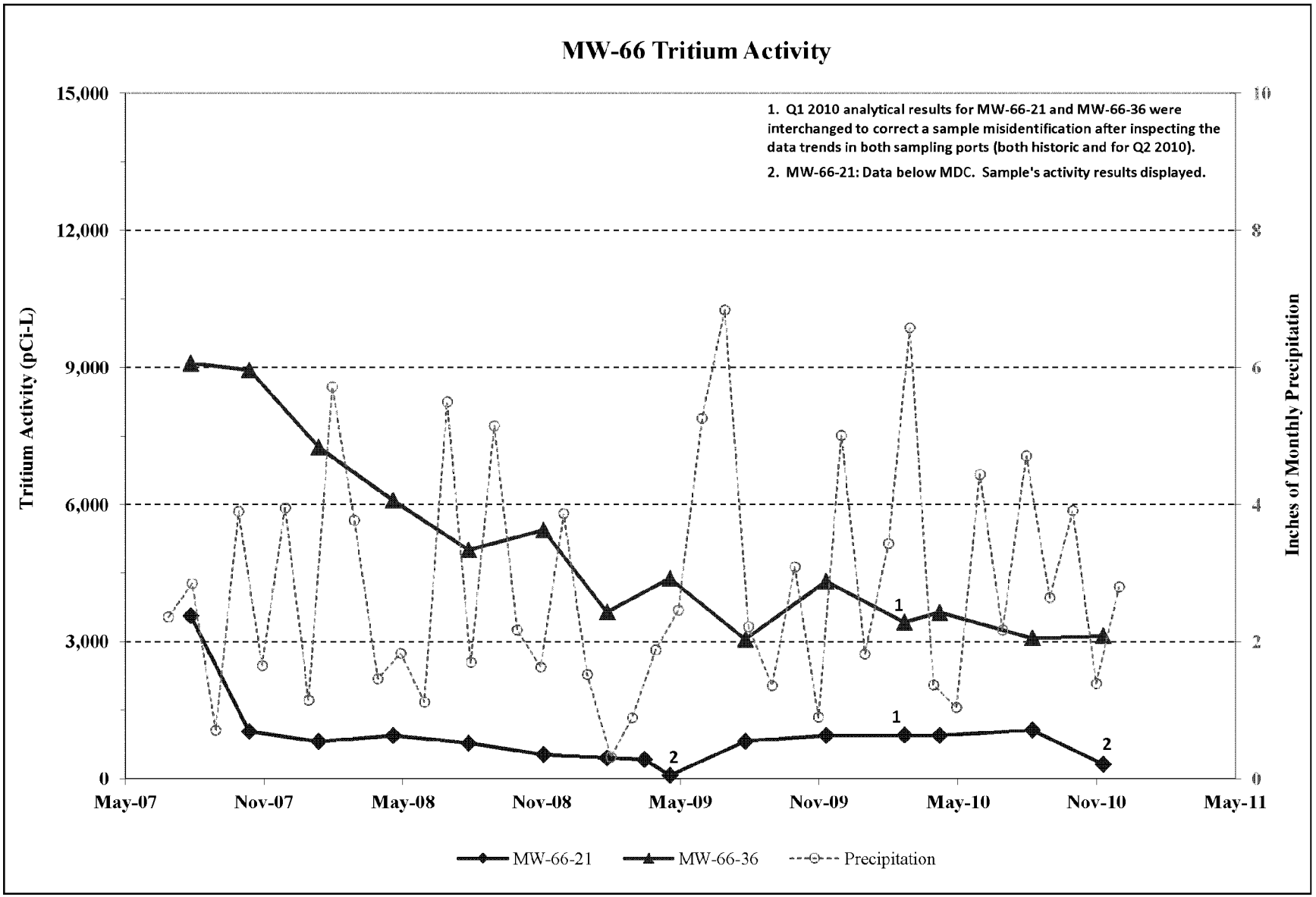


FIGURE G15

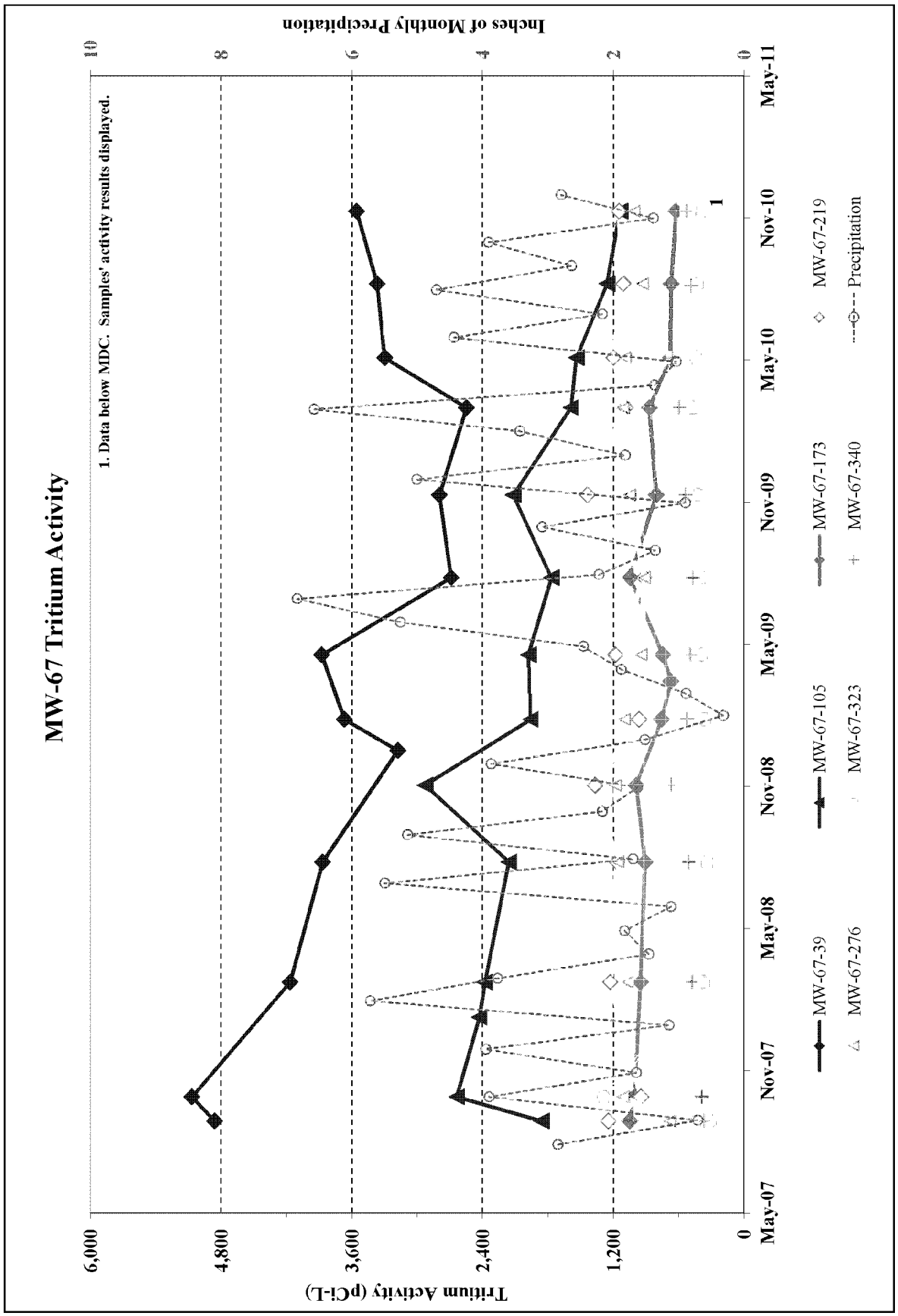
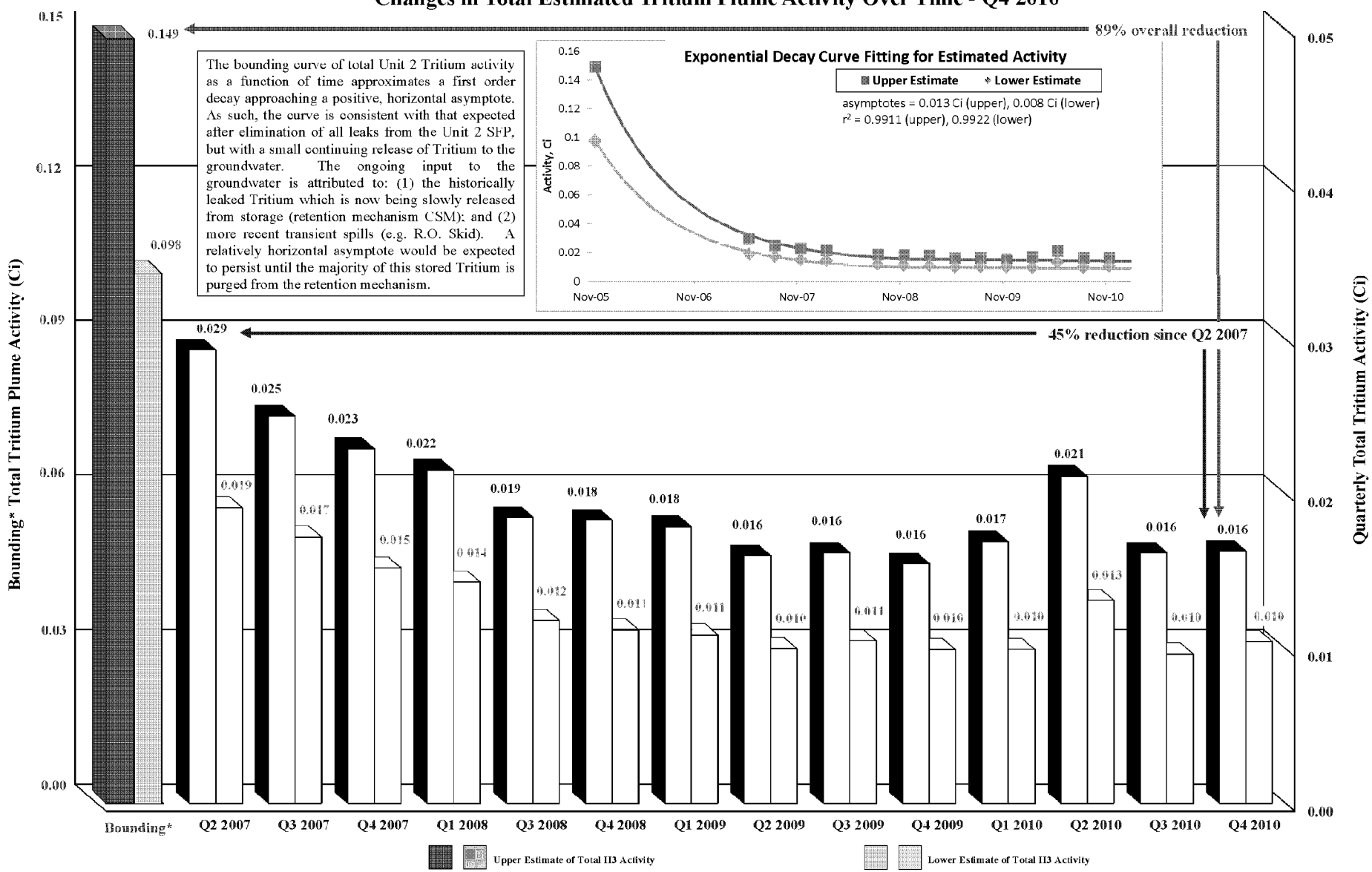

MW-67 Tritium Activity
1. Data below MDC. Samples' activity results displayed.
Tritium Activity (pCi-L)
Inches of Monthly Precipitation
6,000
4,800
3,600
2,400
1,200
0
10
8
6
4
2
0
May-07
Nov-07
May-08
Nov-08
May-09
Nov-09
May-10
Nov-10
May-11
1
MW-67-39
MW-67-105
MW-67-173
MW-67-219
MW-67-276
MW-67-323
MW-67-340
Precipitation

FIGURE G16

IPEC00266493

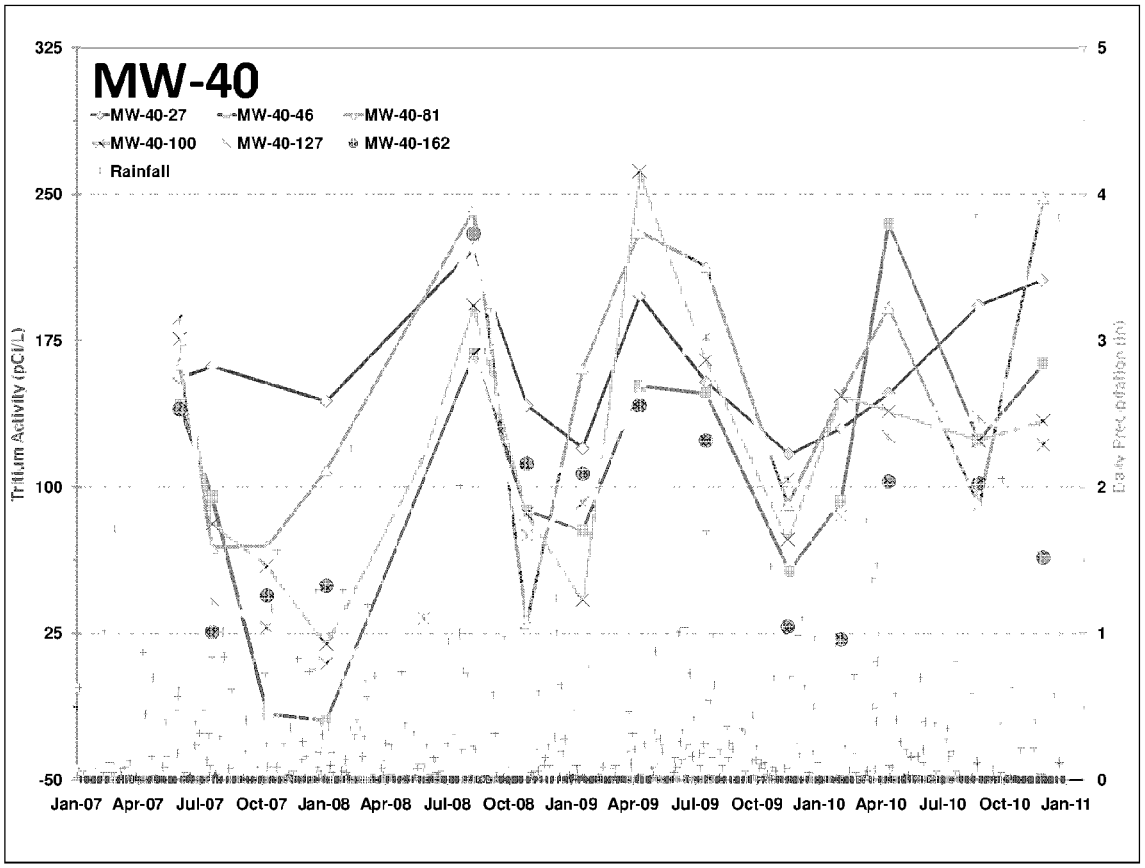


Note. Lower estimate is based on a porosity of 0.0003 which was derived from a pumping test conducted in 2006. Upper estimate is based on a porosity of 0.003 derived from a tracer test conducted in 2007. The Q2 2007 to Q4 2010 Tritium plume activity estimates are each based on Tritium levels measured in the groundwater monitoring installations at individual, quarterly "snapshots" in time. *The bounding activity estimate, however, encompasses a longer period of time, and is focused on the Tritium levels existing during the earliest portions of the groundwater investigation. During this period of time, before termination of all the identified SFP leaks, Tritium concentrations were at their highest levels, but the network of monitoring installations was still being installed. Therefore, measurements made at a multiple times were required to capture early data covering the full extent of the Tritium plume, primarily over the period from Nov 2005 through Nov 2006 (a smaller percentage of the Tritium levels required inclusion of measurements through Sept 2007). For the bounding Tritium plume activity estimate, the highest value recorded for each monitoring location during this time period was used in the analysis. For further discussion see Sections 6.0, 7.0 and 8.0 of the Final Hydrogeologic Site Investigation Report, prepared by GZA and dated January 7, 2008.

Figure G-17

APPENDIX H: SOUTHERN BOUNDARY WELLS

TEMPORAL TRITIUM TRENDS IN SOUTHERN BOUNDARY WELLS



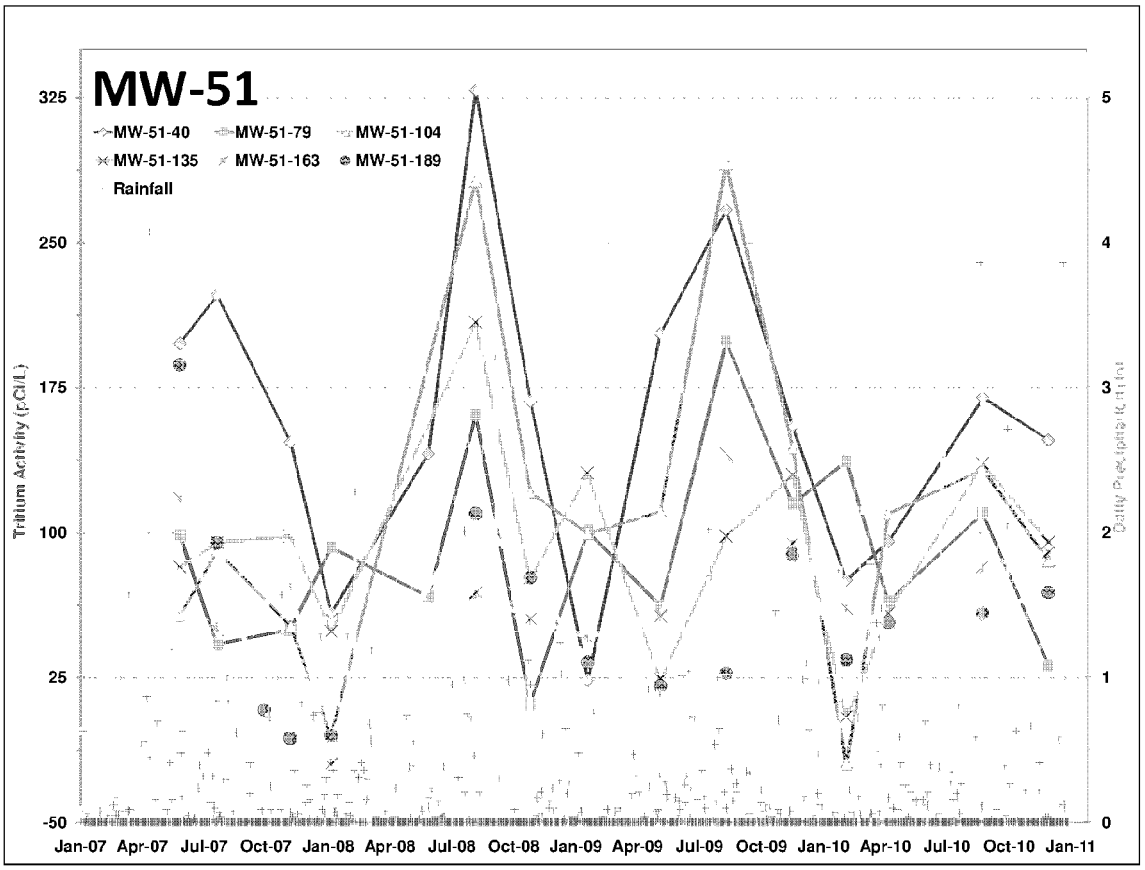


FIGURE H1